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ABSTRACT

This document contains vocational education program course standards (curriculum frameworks and student performance standards) for exploratory courses, practical arts courses, and job preparatory programs offered at the secondary and postsecondary level as part of the health science education component of Florida's comprehensive vocational education program. Curriculum frameworks are provided for 48 programs/clusters: orientation to health and public service occupations; exploration of health occupations; medical skills and services; basic x-ray machine operator; cardiovascular/cardiopulmonary technology; central service technology; clinical laboratory cluster; coder specialist; dental cluster; dental laboratory technology and management; electrocardiograph technology; emergency medical technician; funeral services; health careers cluster; health care services; health information management; health occupations cooperative education; health services management; health unit coordinator, hospital housekeeping supervision; human services; imaging cluster; massage therapy; medical assisting; medical record transcribing; midwifery; nursing (associate degree) R.N.; occupational therapy assistant; ophthalmic dispensing; optometric assisting; paramedic; patient care assistant; patient care technician; physical therapy assistant; practical nursing; psychiatric technology; radiation protection technology; respiratory cluster; surgical technology; unit treatment and rehabilitation; veterinary technology; and vision care technology/opticianry. Each curriculum framework includes some or all of the following: program title, occupational area, grade level, length, certification awarded; major concepts/content covered in the course; laboratory activities; special notes; and intended outcomes. (MN)

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ED 409 432

VOCATIONAL EDUCATION PROGRAM COURSES STANDARDS

July 1997

Health Science Education

CE074351

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VOCATIONAL EDUCATION

PROGRAM COURSES STANDARDS

HEALTH SCIENCE EDUCATION

JULY 1997

FLORIDA DEPARTMENT OF EDUCATION

Division of Applied Technology and Adult Education

Bureau of System Implementation and Technical Assistance
Tallahassee, Florida 32399-0400

904/487-4439

FOREWORD

Section 228.041 Florida Statutes defined vocational education as meaning that instruction not necessarily leading to a baccalaureate degree, either graded or ungraded, listed below:

1. Job/preparatory programs designed to provide students with the minimum competencies necessary for effective entry into an occupation;
2. Exploratory courses designed to give students initial exposure to the skills and aptitudes associated with a broad range of occupations in order to assist them in making informed decisions regarding their future academic and occupational goals.
3. Supplemental programs designed to enable persons who are or have been employed in an occupation to upgrade their competencies in order to reenter or maintain employment or advance within their current occupation;
4. Practical arts courses designed to teach students practical generic skills which, though applicable to some occupations, are not designed to prepare students for entry into a specific occupation; or;
5. Instruction which integrates the basic academic skills and vocational skills.

This document contains vocational education program courses standards (curriculum frameworks and students performance standards) for exploratory courses, practical arts courses and job preparatory programs offered at the secondary or postsecondary level as a part of Florida's comprehensive vocational education program. Vocational education program courses standards are established pursuant to Section 239.205, Section 233.011, and Section 232.2454, Florida Statutes, for school districts and community colleges. State Board of Education Rule 6A-6.0571, Criteria for Qualification of Special Vocational-Technical Education Program Courses, provides the basis for the development and dissemination of this document.

Each program courses standard is composed of two parts: A curriculum framework and student performance standards. The curriculum framework includes four major sections: major concepts/content, laboratory activities, special notes, and intended outcomes. Student performance standards are listed for each intended outcome.

The standards do not prescribe how instruction should be delivered since decisions relative to the delivery of instruction must be made by school districts and community colleges within the context of local conditions. The Division of Applied Technology and Adult Education, Florida Department of Education, supports the belief that competency-based vocational education is the most effective means of providing programs and courses that conform to these established standards.

Program and course standards are based upon competencies required for entry, advancement, and upgrading in occupations in the vocational program areas of Agriculture, Business, Diversified, Health Occupations, Home Economics, Technology, Industrial, Marketing, and Public Service Education. Standards for courses designed for handicapped, disadvantaged, and other special needs persons are also provided. The standards are reviewed annually and revised as needed based upon changes in occupations utilizing input from professional associations, state technical committees, and other representatives for the private sector.

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INTRODUCTION

HEALTH SCIENCE EDUCATION

Health Science Education comprises the body of subject matter and of planned learning experiences designed to prepare persons with competencies required to assist qualified health professionals in providing diagnostic, therapeutic, preventive, restorative, and rehabilitative services to patients in health care facilities, in the home, and in the community. The educational programs offered in Florida may be grouped into the following occupational cluster areas: Dental, Nursing Services, Medical Office, Health Care Information Technology, Emergency Medical Services, Diagnostic Services, Therapeutic Services, Supportive Services, Vision Care Services, and other Health Care Services.

Clinical affiliations or agreements between educational institutions and health care agencies are an integral and critical component of health science education programs. There is an effective integration of didactic experience and clinical experience formalized by written contracts of agreement between the two parties. The programs are designed not only to develop clinical or technical skills but also to teach roles, relationships, and responsibilities in the practice setting.

Techniques for the regulation of workers in the health occupations have been developed and administered as a means of safeguarding the public against unqualified workers. Therefore, regulatory procedures involving licensure, certification, or registration in certain of the health occupations have been established that affect program operation. In Florida, graduates from 24 of the programs must be licensed or certified by the State as a requirement for employment. In addition, graduates from at least 27 programs should be eligible for certification or registration by various accrediting agencies at the state or national level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs is provided through vocational classroom instruction and applied laboratory procedures or practice.

The cooperative education method of instruction is appropriate for many of the health science education programs. However, listed below are those programs for which the cooperative method may not be used:

Basic X-Ray Machine Operator
Dental Assisting, (CDA)
Dental Hygiene
Emergency Medical Technology - EMT
Emergency Medical Technology - Paramedic
First Responder
Massage Therapy
Midwifery

Nursing Assistant (See frameworks for restrictions)
Patient Care Assistant (See framework for restriction.)
Radiologic Technology
Radiation Therapy

The vocational student organization, Health Occupations Students of America is an appropriate method for providing leadership training experience and for reinforcing specific knowledge and skills in the Health Science Education programs. The activities of the organization, when provided must be an integral part of the specific program and must complement the objectives of the program. Many professional associations have provided for student membership in their respective societies particularly if the society provides leadership experiences or reinforces role relationships.

Student performance standards are presented for each curriculum framework outcome. These are minimum standards on which program completers will be evaluated. School districts may add to these minimum standards as the particular area needs for employer requirements are considered.

In order for revisions to be incorporated in these program standards, comments must have been received by the occupational Program Director prior to November 1 of each year. It must be realized that not all changes suggested may be realistic within the confines of the regulatory agency concerned.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Orientation to Health and Public Service Occupations
Occupational Area:	Health Science Education
	Secondary
Program Numbers	**8400110**
CIP Number	0317.99990R
Grade Level	6-9, 30, 31
Length	.5 credits
Certification	HEALTH ED $4 HEALTH $6 ANY HEALTH OCCUP ED G ANY PUBLIC SERV OCC ED G

I. **MAJOR CONCEPTS/CONTENT:** The purpose of this course is to acquaint students with career opportunities and job requirements in health occupations which will enable students to consider career objectives and interests. An asterisk (*) is used to designate minimum competencies for time-shortened courses such as six and nine weeks.

The students will be provided with basic information about the kinds of jobs and workers involved, the various career paths, financial rewards, occupational hazards, and educational requirements. Information concerning the practices for promoting good health is included.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES:** Special projects that are related to occupational clusters are provided, including making dental molds, designing eye glasses, fingerprinting, role playing activities of daily living as a handicapped individual, developing an emergency evacuation plan for their own home, menu planning, and visualizing X-rays. Team teaching and integration of the curriculum with English, Math and Science is encouraged.

III. **SPECIAL NOTE:** The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Guest speakers from industry make an important contribution to the effectiveness of this program/course.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

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IV. **INTENDED OUTCOMES:** After successfully completing this course, the student will be able to:

01.0 Recognize progress in health care and public service.
02.0 Show an awareness of health and public service careers.
03.0 Identify life stages and the health care needs of each.
04.0 Demonstrate basic communication skills.
05.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care and public service worker.
06.0 Demonstrate an understanding of principles of wellness.
07.0 Demonstrate an understanding of the sciences in the health care and public service field.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Orientation To Health And Public Service Occupations
Secondary Number:	8400110
Postsecondary Number:	

01.0 RECOGNIZE PROGRESS IN HEALTH CARE AND PUBLIC SERVICE--The student will be able to:

01.01* Compare medical progress from early times to the present. For example: surgical techniques, anesthesia, treatment and equipment.
01.02* Describe progress in public service occupations from early times to the present.

02.0 SHOW AN AWARENESS OF HEALTH AND PUBLIC SERVICE CAREERS--The student will be able to:

02.01* Describe the relationship between self-awareness and satisfying career choices.
02.02* Demonstrate an understanding of tasks related to health and public service careers.
02.03 Identify the personal traits required for employment in health care and public service.
02.04 List factors related to job satisfaction.
02.05* Complete a project, solve a problem, or complete an activity related to a career through team or group work.
02.06* Identify at least three occupations out of each of the career clusters: nursing services, dental auxiliary, medical office, health care information technology, emergency medical services, diagnostic services, therapeutic services, supportive services, vision care services, and other health care services (including mental health).
02.07* Identify at least three occupations out of each of the career clusters: criminal justice, fire fighting, parks and recreation, and environmental occupations.
02.08* Recognize the differences between volunteer and governmental agencies in health and public service.
02.09* Identify types of education and training levels as related to health and public service careers.
02.10 Appreciate the importance of legal and ethical behaviors as related to health and public service careers.

03.0 IDENTIFY LIFE STAGES AND THE HEALTH CARE NEEDS OF EACH--The student will be able to:

03.01* Describe common health care needs from birth to death and identify occupations that address those needs.
03.02* Identify occupations aimed at promoting optimum health.

04.0 DEMONSTRATE BASIC COMMUNICATION SKILLS--The student will be able to:

04.01* Demonstrate the ability to follow written and oral directions.
04.02* Demonstrate examples of verbal and non-verbal communication.
04.03 Recognize the role and use of terminology and abbreviations used in various health and public service occupations.

05.0 PERFORM BASIC MATHEMATICAL CALCULATIONS AND DEMONSTRATE PROBLEM SOLVING SKILLS USED BY THE HEALTH CARE AND PUBLIC SERVICE WORKER--The student will be able to:

05.01* Describe the importance of why accurate calculations and effective problem solving skills are required.
05.02 Accurately identify and perform appropriate numeric procedures with problems found in numeric, symbolic, or word form as they relate to the occupations.

06.0 DEMONSTRATE AN UNDERSTANDING OF PRINCIPLES OF WELLNESS--The student will be able to:

06.01 Describe how cultural and individual differences relate to wellness and quality of life and how these differences impact health problems of society.
06.02 Demonstrate an understanding of the risk factors that contribute to illness.
06.03* Identify consequences of substance abuse and high risk behaviors.
06.04* Identify ecological issues that affect wellness and identify environmental careers associated such as parks and recreation, health inspectors, sanitarians.

07.0 DEMONSTRATE AN UNDERSTANDING OF THE SCIENCES IN THE HEALTH CARE AND PUBLIC SERVICE FIELDS--The student will be able to:

07.01* Recognize the role science has in the health and public service fields.

* Indicates essential competencies for time-shortened scheduling such as six and nine week courses.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Exploration of Health Occupations
Occupational Area:	Health Science Education
	Secondary
Program Numbers	**8400210**
CIP Number	0317.9999EX
Grade Level	6-9, 30, 31
Length	.5 credit
Certification	ANY HEALTH OCCUP ED G HOME EC $1 $2 VOC HM EC $4

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this course is to give students initial exposure to the skills and attitudes associated with a broad range of occupations relating to careers in health, including job requirements and tasks performed, to assist students in making informed decisions regarding their future academic and occupational goals.

The content includes, exploratory activities relating to all health occupational clusters. An asterisk (*) is used to indicate essential competencies for time-shortened scheduling such as six and nine week courses. The program also includes an introduction to medical ethics, consumerism, characteristics of health care workers, community health agencies and basic computer literacy.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES**: Special projects that are related to each occupational cluster are provided, including role playing activities related to specific careers, visualizing x-rays and crutch-walking, operating the microscope, making orthopedic casts, and specific lab procedures. Team teaching and integration of the curriculum with English, Math and Science is encouraged.

III. **SPECIAL NOTE**: Guest speakers from industry and related field trips make important contributions to the effectiveness of this course.

The Health Occupations Students of America is an appropriate vocational student organization for providing leadership training and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

IV. **INTENDED OUTCOMES**: After successfully completing this course, the student will be able to:

01.0 Identify and discuss progress in health care.
02.0 Demonstrate an understanding of health careers.
03.0 Demonstrate an understanding of the importance of legal and ethical behavior related to health care.
04.0 Perform basic communication skills.
05.0 Perform basic mathematical calculations and demonstrate problem solving skills used by the health care worker.
06.0 Apply science principles to the health care field.
07.0 Perform basic health care skills.
08.0 Demonstrate occupational safety.

July 1996

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Exploration Of Health Occupations
Secondary Number: 8400210
Postsecondary Number:

01.0 IDENTIFY AND DISCUSS PROGRESS IN HEALTH CARE--The student will be able to:

01.01* Demonstrate knowledge of how the scientific method and advances in science have impacted beliefs and practices from ancient times to the present.
01.02 Compare the broad scope of health care delivery systems in homes, institutions, and the community.
01.03* Demonstrate ability to make informed decisions regarding choice of health care providers and products.
01.04 Research contributions made in the field of medical science and their impact on the health care field.

2.0 DEMONSTRATE AN UNDERSTANDING OF HEALTH CAREERS--The student will be able to:

02.01* Identify the personal traits required for employment in health care and discuss factors related to job satisfaction.
02.02* List at least three careers out of each of the career clusters: nursing services, dental auxiliary, medical office, mental health, health care information technology, emergency medical services, diagnostic services, therapeutic services, supportive services, vision care services, and other health care services (including mental health).
02.03* Demonstrate the knowledge of skills needed to research and describe a career from the above clusters.
02.04 List the advantages and disadvantages of one occupation in each cluster including the following factors; job opportunities, salary range, fringe benefits, working conditions, occupational hazards, and educational requirements.

3.0 DEMONSTRATE AN UNDERSTANDING OF THE IMPORTANCE OF LEGAL AND ETHICAL BEHAVIOR RELATED TO HEALTH CARE--The student will be able to:

03.01* Identify responsibilities in maintaining ethical standards, confidentiality, and the patient's rights.
03.02* Define terms related to the legal and ethical aspects of the health care industry. For example: malpractice, negligence, invasion of privacy, quackery, ethics and law, Patients Bill of Rights.
03.03* Identify ethical and unethical conduct through simulated examples such as role playing, making posters, TV commercials, etc.

04.0 PERFORM BASIC COMMUNICATION SKILLS--The student will be able to:

04.01 Demonstrate ability to follow written and oral directions.

04.02 Demonstrate examples of verbal and non-verbal communication.

04.03* Identify employability skills necessary to obtain a job in health care.

04.04* Demonstrate an understanding of how computers and other technology are used in the health care field.

04.05* Use common medical terminology and abbreviations associated with health occupations.

05.0 PERFORM BASIC MATHEMATICAL CALCULATIONS AND DEMONSTRATE PROBLEM SOLVING SKILLS USED BY THE HEALTH CARE WORKER--The student will be able to:

05.01* Identify the importance of why accurate calculations and effective problem solving skills are required for health care workers.

05.02* Calculate mathematical problems and measurements related to health care.

05.03* Understand the role of scientific method in problem solving and medical research.

05.04 Convert common weights, measure, and volumes to metric as applied in the health care setting.

06.0 APPLY SCIENCE PRINCIPLES TO THE HEALTH CARE FIELD--The student will be able to:

06.01* Identify the general plan of the human body and how it functions.

06.02* Demonstrate how the principles of physical science, biology, and microbiology applies within the health care industry.

07.0 PERFORM BASIC HEALTH CARE SKILLS--The student will be able to:

07.01* Measure and record (graph) height, weight, and temperature, pulse and respiration (TPR), intake and output of body fluids.

07.02* Demonstrate medical aseptic technique by handwashing, gloving, and application of mask and gown.

07.03 Perform proper body mechanics to prevent self and patient injuries.

07.04* Demonstrate basic first aid skills.

07.05 Recognize the need for personal comfort measures to include skin care, bed bath, bedmaking, mouth care.

07.06 Show an awareness of safe patient transfer techniques.

07.07 Recognize the importance of instructions to patients in safe use of assisting devices.

08.0 DEMONSTRATE OCCUPATIONAL SAFETY--The student will be able to:

08.01 Discuss occupational safety issues that relate to the employer, employee, and the patient in the health care setting.

08.02 Demonstrate health safety habits that will prevent injury to health care workers, co-workers, and patients.

08.03 Show an awareness of the importance of identifying poisons and hazardous materials commonly found in the workplace.

08.04 Describe the importance of fire safety including prevention and evacuation.

* indicates essential competencies for time-shortened scheduling such as six and nine week courses.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Medical Skills and Services
Occupational Area:	Health Science Education
	Secondary
Program Numbers	**8400320**
CIP Number	0317.9997PA
Grade Level	9-12, 30, 31
Length	1 credit
Certification	ANY HEALTH OCCUP ED G

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this course is to provide students with practical generic skills in health occupations which, though applicable to some health occupations, are not designed to prepare students for entry into a specific occupation.

II. **LABORATORY ACTIVITIES**: Laboratory activities contribute to the development of skills. Demonstrations and return demonstrations provide students with an understanding of correct procedure methods and enhance learning. Special project assignments are utilized.

III. **SPECIAL NOTE**: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction is not appropriate for this course.

When a student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which the student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

IV. **INTENDED OUTCOMES:** After successfully completing this course, the student will be able to:

01.0 Perform basic communication skills.
02.0 Perform basic mathematic skills used in health care.
03.0 Describe the services provided by health occupations career clusters.
04.0 Demonstrate basic health skills.
05.0 Demonstrate first aid and CPR.
06.0 Demonstrate responsible consumer decision making regarding health screening and health care management.
07.0 Discuss legal aspects for the health consumer.
08.0 Discuss stress and its effect on the individual
09.0 Identify the needs of the terminally ill.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Relate the use of computers in the health care field.
12.0 Demonstrate employability skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Medical Skills & Services
Secondary Number:	8400320
Postsecondary Number:	

01.0 PERFORM BASIC COMMUNICATION SKILLS--The student will be able to:

- 01.01 Demonstrate examples of verbal and non-verbal communication.
- 01.02 Differentiate between negative and positive values of defense mechanisms.
- 01.03 Demonstrate ability to follow written and oral directions.
- 01.04 Define, pronounce and spell common medical terms and abbreviations necessary to safely carry out medical instructions.
- 01.05 Discuss the difference between constructive and non-constructive criticism.

02.0 PERFORM BASIC MATHEMATIC SKILLS USED IN HEALTH CARE--The student will be able to:

- 02.01 Take and record height and weight in various forms of measurement systems used in health care.
- 02.02 Convert common weights, measures and volumes to metric.
- 02.03 Convert from regular to 24-hour clock time.

03.0 DESCRIBE THE SERVICES PROVIDED BY HEALTH OCCUPATIONS CAREER CLUSTERS--The student will be able to:

- 03.01 Discuss the history of health care services.
- 03.02 Identify the basic components of the health care delivery system.
- 03.03 List at least 3 types of services provided by the following career clusters:
  - a. Nursing Services
  - b. Dental Auxiliary
  - c. Medical Office
  - d. Health Care Information Technology
  - e. Emergency Medical Services
  - f. Diagnostic Services
  - g. Therapeutic Services
  - h. Supportive Services
  - i. Vision Care Services
  - j. Other Health Care Services
- 03.04 List at least two occupations for each cluster.
- 03.05 Identify services provided by other health care agencies.

04.0 DEMONSTRATE BASIC HEALTH SKILLS--The student will be able to:

- 04.01 Perform proper handwashing technique.
- 04.02 Demonstrate one basic safe transport and/or transfer technique in the home and in emergency situations.

04.03 Demonstrate the use of basic body mechanics technique.
04.04 Demonstrate and record vital signs procedure.
04.05 Demonstrate at least two dental occupational skills from the following list: brushing and flossing techniques, setting up a basic dental tray, and identifying surfaces of the teeth.
04.06 Demonstrate at least two laboratory occupational skills from the following list: operate a microscope, simulate obtaining a culture specimen, prepare a slide, or streak an agar plate.
04.07 Demonstrate at least two physical therapy occupational skills from the following list: range of motion exercises, use of crutches, use of canes, application of ice bags or ice collars, or application of warm water bags.
04.08 Demonstrate at least two medical secretarial occupational skills from the following list: using the telephone, scheduling appointments, typing a business letter or completing, copying, mailing and filing medical records, forms, or using a computer to input and retrieve information.

05.0 DEMONSTRATE FIRST AID AND CPR--The student will be able to:

05.01 Describe wounds and their treatment.
05.02 Identify shock and treatment.
05.03 Recognize types of poisoning and treatment.
05.04 Identify classifications of burns and their appropriate treatment.
05.05 Describe ill effects of heat and cold.
05.06 Demonstrate immobilization for suspected fractures.
05.07 Recognize the signs of heart attack, fainting and epilepsy, and diabetic reactions.
05.08 Describe first aid for foreign objects in the eye, ear, air passages, and food passages.
05.09 Determine when a doctor's care is necessary.
05.10 Demonstrate activation of the emergency medical system (EMS).
05.11 Perform skills in BLS.

06.0 DEMONSTRATE RESPONSIBLE CONSUMER DECISION MAKING REGARDING HEALTH SCREENING AND HEALTH CARE MANAGEMENT--The student will be able to:

06.01 List ways one can obtain health screening/physical exams.
06.02 Demonstrate Vision Screening.
06.03 Demonstrate ability to test for hearing using simple tools.
06.04 Demonstrate ability to test reflexes.

07.0 DISCUSS LEGAL ASPECTS FOR THE HEALTH CONSUMER--The student will be able to:

07.01 Explain how the "Good Samaritan" Law protects the first responder in emergency situations.
07.02 Define the "Living Will".
07.03 Discuss legal procedures for donating organs.
07.04 Define and discuss "Generic", over the counter, and brand name prescription drugs.
07.05 Discuss the need for health insurance.

07.06 Discuss how to select physicians, dentists, hospitals, and pharmacys according to individual needs.

08.0 DISCUSS STRESS AND ITS EFFECT ON THE INDIVIDUAL--The student will be able to:

08.01 Define stress/stressors.
08.02 Identify problem solving skills to resolve stress.
08.03 Discuss various crises intervention services available in the local community.
08.04 Identify factors that explain why health occupations are emotionally and physically demanding.
08.05 Discuss the demanding time schedule expected of the health care worker (24 hrs/day, 7 days/week, 52 weeks/year).

09.0 IDENTIFY THE NEEDS OF THE TERMINALLY ILL--The student will be able to:

09.01 Discuss death and dying.
09.02 Define stages of grief.
09.03 Describe mortuary science.
09.04 Discuss and describe services provided by funeral directors/funeral homes.
09.05 Identify community support agencies for the terminally ill.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
10.02 Identify community resources and services available to the individual with diseases caused by blood borne pathogens.
10.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspect of AIDS, including testing.

11.0 RELATE THE USE OF COMPUTERS IN THE HEALTH CARE FIELD--The student will be able to:

11.01 Identify careers that require computer knowledge in the health care setting.
11.02 Discuss how computers affect legal and ethical questions in the health field.
11.03 Discuss how computers have affected changes in health care and the health care system.

12.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

12.01 Locate and identify local job openings in health care.
12.02 Complete a job application.

12.03 Prepare for a job interview.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Basic X-Ray Machine Operator
Program Type:	Job Preparatory
Occupational Area:	Health Science Education
Components:	Core, One Program, One Occupational Completion Point.
	PSAV
Program Numbers	**H170209**
CIP Number	0317.020902
Grade Level	30, 31
Length	600 hours
Certification	Tec X-Ray @ 7 G
Facility Code	252
VSO	HOSA
Coop Method	No
Apprenticeship	No
Basic Skills	
Math	10
Language	10
Reading	10

I. **PURPOSE**: The purpose of this program is to prepare students for employment as x-ray technicians (32921223) or to provide supplemental training for persons previously or currently employed in this occupational area.

The content includes, but is not limited to, patient care, radiation protection, patient positioning, radiographic equipment and accessories, image production and evaluation, administrative and personal competence, and communication and employability skills. Legal and ethical responsibilities, health-illness concepts, emergency procedures, including CPR, first aid, safety and security procedures, medical terminology, and anatomy and physiology are basic to all health occupation programs.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

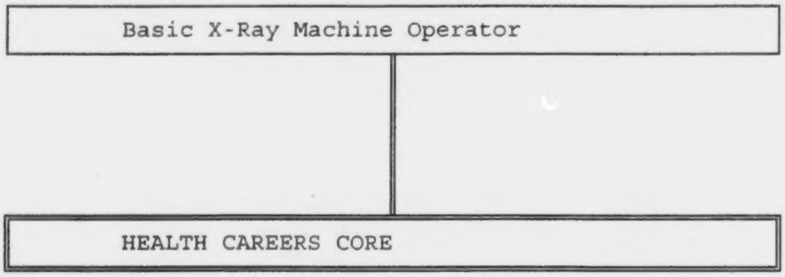
This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **PROGRAM STRUCTURE**: This cluster is a planned sequence of instruction consisting of a core, one program and one occupational completion point. When the recommended sequence is followed, the structure will allow students to complete specified portions of the program for employment or remain for advanced training.

Students must complete the core, or demonstrate the mastery of skills standards contained in the core, before advancing in the program:

BASIC X-RAY MACHINE OPERATOR

THE FOLLOWING DIAGRAM ILLUSTRATES THE CLUSTER STRUCTURE



III. **LABORATORY ACTIVITIES:** Simulation exercises and laboratory activities should be provided using energized radiographic equipment and facilities. Special emphasis should be placed on radiation protection, patient positioning, with image quality. Clinical learning experiences in a radiographic room with related accessories must be an integral part of this program. All clinical experience must be under the direct supervision of a licensed practitioner.

IV. **SPECIAL NOTE:** The programs in this cluster meet the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Health Occupations Students of America, (HOSA) Inc., is the appropriate vocational student organization as well as participation in a career related professional organization for providing leadership training experiences and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum [6A-6.064(7),F.S.].

The program sponsor should be familiar with the guidelines and requirements of a limited radiography program developed by the Joint Review Committee on Education in Radiologic Technology. Program completers will be eligible to take the Florida certification examination administered by the Florida Department of Health and Rehabilitative Services. Florida requires licensing of Basic X-Ray Machine Operators by the DHRS. Articulation into the Radiography program should be considered in planning this program.

In accordance with Rule 6a-10.040, FAC, the minimum basic skills grade level required for postsecondary adult vocational students to exit the programs in this cluster are listed at the program level or at the occupational completion points within the program. These grade level numbers correspond to a grade equivalent score obtained on one of the state designated basic skills examinations. If a student does not meet the basic skills level required for completion of the program, remediation should be provided concurrently in the System for Applied Individualized Learning (SAIL) lab prior to admission in an Adult Basic Education (ABE) setting.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this cluster and is printed in a supplement to this document.

V. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health occupations program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)
01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OCCUPATIONAL COMPLETION POINT - DATA CODE A **(12.0 - 23.0)**
BASIC X-RAY MACHINE OPERATOR - Industry Title

12.0 Provide basic patient care.

14.0 Demonstrate the ability to provide patient instruction and care as it relates to radiology.
15.0 Demonstrate proper radiation protection to patients, self and others.
16.0 Demonstrate an understanding of the use of contrast media in radiographic studies.
17.0 Demonstrate an understanding of how to properly position patients for prescribed radiographic studies.
18.0 Demonstrate the ability to operate and maintain radiographic equipment/accessories.
19.0 Demonstrate an understanding in selecting the manual technique necessary to produce quality radiographs.
20.0 Demonstrate knowledge of how to process radiographic films and maintain processing equipment.
21.0 Demonstrate knowledge necessary to evaluate x-ray film quality.
22.0 Demonstrate knowledge of how to perform managerial activities.
23.0 Demonstrate knowledge of how to develop personal/professional competence.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Basic X-Ray Machine Operator
Secondary Number:
Postsecondary Number: H170209

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

BASIC X-RAY MACHINE OPERATOR--The intended outcome (12-26) completes the occupational completion point of Basic X-Ray Machine Operator. To facilitate cross-training, Licensed Practical Nurses do not have to repeat intended outcomes 12 and 13.

12.0 PROVIDE PATIENT CARE--The student will be able to:

12.01 Preserve patient's dignity and privacy.
12.02 Address the needs of elderly patients.
12.03 Address the needs of pediatric patients.
12.04 Address the needs of trauma patients.
12.05 Address the needs of handicapped patients.
12.06 Take and record patient's vital signs.
12.07 Use aseptic techniques.
12.08 Identify emergency situations.
12.09 Identify emergency evacuation procedures.

13.0 DEMONSTRATE COMMUNICATION SKILLS--The student will be able to:

13.01 Establish patient rapport.
13.02 Confirm doctor's verbal orders.
13.03 Confirm doctor's written orders.
13.04 Use effective communication with patients.
13.05 Obtain pertinent and relevant patient information to assist in the diagnosis.

14.0 DEMONSTRATE THE ABILITY TO PROVIDE PATIENT INSTRUCTION AND CARE AS IT RELATES TO RADIOLOGY--The student will be able to:

14.01 Explain radiographic procedure(s) to patient.
14.02 Interview patients for possible sensitivity to contrast media.
14.03 Provide for patients' comfort as related to radiologic procedures.
14.04 Check integrity of all equipment attached to patients.
14.05 Prepare patients properly for radiograph/contrast media examinations.
14.06 Select contrast media equipment.
14.07 Confirm patients' preparation for contrast media exam.
14.08 Prepare contrast media.

14.09 Assist physician in administering contrast media.
14.10 Identify and report patient reaction to contrast media.
14.11 Attend to post-examination needs of patients.
14.12 Evaluate and apply first aid procedures in a trauma situation.

15.0 DEMONSTRATE PROPER RADIATION PROTECTION TO PATIENTS, SELF AND OTHERS--The student will be able to:

15.01 Explain biological effects of ionizing radiation.
15.02 Question female patients concerning the possibility of pregnancy and document in patients' charts.
15.03 Identify and select proper Pb shielding (gonadal, thyroid, eye).
15.04 Select appropriate film/screen combination (fastest without compromising quality of image).
15.05 Determine shortest possible exposure time.
15.06 Identify and use personnel radiation monitoring devices properly.
15.07 Identify and select proper immobilization/protective devices.
15.08 Stand behind protective barrier during exposure.
15.09 Secure the area prior to taking radiograph.
15.10 Minimize repeat radiographs.
15.11 Identify and use the principles of time, distance, and shielding.
15.12 Utilize collimation/restriction of primary x-ray beam, to limit the area being exposed by radiation.

16.0 DEMONSTRATE AN UNDERSTANDING OF THE USE OF CONTRAST MEDIA IN RADIOGRAPHIC STUDIES--The student will be able to:

16.01 Interview patients for possible sensitivity to contrast media.
16.02 Select contrast media equipment.
16.03 Confirm patients' preparation for contrast media exam.
16.04 Prepare contrast media.
16.05 Assist physician in administering contrast media.
16.06 Identify and report patient reaction to contrast media.
16.07 Recognize and respond to patients' reactions to contrast media.

17.0 DEMONSTRATE AN UNDERSTANDING OF HOW TO PROPERLY POSITION PATIENTS FOR PRESCRIBED RADIOGRAPHIC STUDIES--The student will be able to:

17.01 Identify the anatomy and physiology and use appropriate medical terminology for the part to be radiographed.
17.02 Locate the anatomical landmarks and utilize the appropriate landmarks when doing radiographs.
17.03 Apply appropriate immobilization devices as necessary.
17.04 Apply positioning aids (sponges, compression bands, film/cassette holders, tape, etc.).
17.05 Apply lead blockers/strips/shields.
17.06 Position patients for radiographs of the following: upper and lower extremities, abdomen, spine, skull, chest, sinuses, contrast media studies, and foreign body localization.
17.07 Demonstrate appropriate positioning for pediatric radiographic examinations.

17.08 Demonstrate care and proper Pb shielding of pediatric patients.
17.09 Instruct patient in proper breathing technique for the anatomical part being x-rayed (inspiration and expiration).
17.10 Use appropriate radiographic terminology.

18.0 DEMONSTRATE THE ABILITY TO OPERATE AND MAINTAIN RADIOGRAPHIC EQUIPMENT/ACCESSORIES--The student will be able to:

18.01 Activate equipment (properly warm-up x-ray tube to prevent damage).
18.02 Select appropriate film/screen combinations.
18.03 Select appropriate film holder size and type of cassette (i.e. 8X10/10X12, screen/grid, etc).
18.04 Apply correct lead markers (Lt, Rt, upright, decub, etc.) prior to exposure.
18.05 Place cassette appropriately (lengthwise or crosswise).
18.06 Maneuver radiographic tables and tubes.
18.07 Handle exposed film/holder appropriately.
18.09 Maintain radiographic tables in operable condition.
18.10 Store unexposed film properly (open and closed boxes of film).
18.11 Clean film holders, including screens.
18.12 Replace collimator light bulb.
18.13 Identify and report basic radiographic equipment malfunctions.
18.14 Organize, maintain cleanliness, and keep radiographic room adequately stocked with necessary supplies.
18.15 Demonstrate proper use of radiolucent and radiopaque accessories and techniques.

19.0 DEMONSTRATE AN UNDERSTANDING IN SELECTING THE MANUAL TECHNIQUE NECESSARY TO PRODUCE QUALITY RADIOGRAPHS--The student will be able to:

19.01 Set proper radiographic tube distance (table top or bucky).
19.02 Adjust collimator.
19.03 Measure patient with calipers properly.
19.04 Consult technique chart.
19.05 Select bucky/non-bucky control.
19.06 Set kV control.
19.07 Set mA control.
19.08 Set timer control.
19.09 Expose radiographs.

20.0 DEMONSTRATE KNOWLEDGE OF HOW TO PROCESS RADIOGRAPHIC FILMS AND MAINTAIN PROCESSING EQUIPMENT--The student will be able to:

20.01 Clean chemical tanks periodically.
20.02 Mix chemicals properly.
20.03 Check and set developer temperature.
20.04 Select developing time.
20.05 Secure developing room (free of light leaks).
20.06 Remove film from film cassette properly.
20.07 Place patient identification on film.
20.08 Place film on hanger.
20.09 Insert film in processing chemicals in correct sequence.
20.10 Dry film.

20.11 Perform daily maintenance for automatic processor.
20.12 Start up automatic processor.
20.13 Insert exposed film into automatic processor.
20.14 Reload and store cassettes properly.
20.15 Remove dry film.
20.16 Identify and report film processor malfunctions.

21.0 DEMONSTRATE KNOWLEDGE NECESSARY TO EVALUATE X-RAY FILM QUALITY--The student will be able to:

21.01 Place film in correct anatomical position on view box.
21.02 Determine image sharpness.
21.03 Determine proper contrast.
21.04 Determine proper density.
21.05 Evaluate anatomical positioning.
21.06 Identify film artifacts and their possible causes.
21.07 Confirm patient identification on film.
21.08 Confirm anatomical areas with Pb markers (exposed on film).
21.09 Confirm that the film demonstrates all anatomical structures and are visible for the radiographic study ordered by the physician.
21.10 Review film with supervisor.
21.11 Identify possible causes of radiographic errors.
21.12 Verify proper number of films and anatomical positions radiographed.

22.0 DEMONSTRATE KNOWLEDGE OF HOW TO PERFORM MANAGERIAL ACTIVITIES--The student will be able to:

22.01 Order radiographic supplies.
22.02 Order office/clerical supplies.
22.03 File radiographic reports.
22.04 Maintain radiographic film files and purge outdated film greater than seven years.
22.05 Schedule patients' examinations.
22.06 Prepare and process incident reports.
22.07 Demonstrate knowledge of basic computer skills.
22.08 Know the physicians standards when calling and/or send radiographic report(s) to appropriate personnel.
22.09 Prepare and process x-ray requisitions properly.

23.0 DEMONSTRATE KNOWLEDGE OF HOW TO DEVELOP PERSONAL/ PROFESSIONAL COMPETENCE--The student will be able to:

23.01 Identify ways to keep current in technological developments.
23.02 Interpret and comply with standard operating procedures.
23.03 Know and comply with legal standards for radiology professionals.
23.04 Know and comply with state regulations and laws for radiology professionals.
23.05 Determine personal liability needs for radiology.
23.06 Maintain professional radiology standards.
23.07 Practice proper body mechanics related to radiology situations.

23.08 Maintain state licensure and affiliation with professional organizations.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Cardiovascular/Cardiopulmonary Technology
Occupational Area:	Health Science Education
	PSV
CIP Number	0317.020100
Grade Level	College Credits
Length	AS Degree Cardiovascular Program/77 credit hours Cardiopulmonary Program/83 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as cardiovascular technologists, cardiopulmonary technologists, or cardiology technologist(32925209). Cardiovascular/cariopulmonary technology educational programs will address one or more of the three basic sub-specialties: invasive cardiology, noninvasive cardiology, or noninvasive peripheral vascular study. Cardiopulmonary technology will include the additional component of pulmonary function testing. When the cardiovascular program competencies are offered, the program cannot exceed 77 credit hours. When the Cardiopulmonary competencies are offered, the program cannot exceed 83 credit hours. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

The course content includes, but is not limited to, instruction in performing examinations leading to diagnosis and treatment of patients with cardiac and peripheral vascular disease. Cardiovascular/
cardiopulmonary technologists are not trained to expose patients to ionizing radiation. A clinical component is a necessary element of this program. Reinforcement of basic skills in English, mathematics and science occurs through classroom instruction and applied laboratory practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Simulation exercises using appropriate equipment are provided. Clinical laboratory experiences are integrated with the didactic portion of this program. The Human Patient Simulator (HPS) may be used to fulfill or enhance some clinical hours.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The program should meet the requirements of the American Medical Association Commission on Accreditation of Allied Health Education Programs (CAAHEP), 515 North State Street, Suite 7530, Chicago, Illinois 60610-4377, 303/464-4623. Graduates should be prepared to take the appropriate registry and/or state licensure examinations. To obtain registry information contact:

Cardiovascular Credentialing International (CCI)
4456 Corporation Lane, Suite 350
Virginia Beach, VA 23462 1-800/326-0268

Students should be encouraged to become members of Health Occupations Students of America (HOSA), Inc., and/or their appropriate professional organization. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program.

The standard credit hour length for cardiovascular technology is 77 credit hours and for cardiopulmonary technology is 83 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES:**

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

CARDIOVASCULAR/CARDIOPULMONARY TECHNOLOGIST (12-18)

12.0 Identify the anatomic structure and function of body systems in relation to cardiovascular disease and studies.
13.0 Practice safety and quality assurance.
14.0 Follow legal, ethical and professional principles related to the practice of cardiovascular technology.
15.0 Use basic medical electronics and medical instrumentation.
16.0 Describe the role of the cardiovascular technologist in catastrophic event management.
17.0 Discuss the pharmacological aspects of cardiovascular drugs.
18.0 Perform patient care, record patient history and practice effective patient communication.

One of the following sub-specialties _must_ be added to the intended outcomes. Additional sub-specialties may be included as desired.

For those programs which include the **INVASIVE CARDIOLOGY SUB-SPECIALTY**, the student will be able to:

19.0 Assist in all aspects of invasive cardiovascular techniques with emphasis on cardiac catheterization.
20.0 Perform and interpret blood gas analyses.

For those programs which include the **NONINVASIVE CARDIOVASCULAR SUB-SPECIALTY**, the student will be able to:

21.0 Perform noninvasive cardiovascular techniques with an emphasis on echocardiography.

For those programs which include the **NONINVASIVE PERIPHERAL VASCULAR SUB-SPECIALTY**, the student will be able to:

22.0 Perform noninvasive peripheral vascular studies.

For those cardiopulmonary technology programs the additional PULMONARY COMPONENT MUST be added. Following this component the student will be able to:

23.0 Perform pulmonary function testing.
24.0 Perform and interpret blood gas analyses.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Cardiovascular/Cardiopulmonary Technology
Secondary Number:
Postsecondary Number: 0317.020100

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.

02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.

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06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

Cardiovascular Technology--Students complete this occupational exit as Cardiovascular Technologists.

12.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO CARDIOVASCULAR DISEASE AND STUDIES--The student will be able to:

12.01 Describe human anatomy and physiology with emphasis on the cardiovascular and pulmonary systems.
12.02 Discuss principles and methods of disease transmission and prevention.
12.03 Identify normal and abnormal data obtained from medical tests.
12.04 Describe basic pathological conditions of the cardiovascular and pulmonary systems.

13.0 PRACTICE SAFETY AND QUALITY ASSURANCE--The student will be able to:

13.01 Observe acceptable safety practices in cardiovascular instrumentation.
13.02 Demonstrate knowledge of radiation safety procedures.
13.03 Demonstrate knowledge of quality assurance as it relates to imaging equipment, film quality, etc.

14.0 FOLLOW LEGAL, ETHICAL AND PROFESSIONAL PRINCIPLES RELATED TO THE PRACTICE OF CARDIOVASCULAR TECHNOLOGY--The student will be able to:

14.01 Describe the cardiovascular technology profession.

14.02 Describe the sub-specialties of non-invasive cardiology, invasive cardiology, vascular technology and cardiopulmonary technology.
14.03 Identify the cardiovascular professional organizations and discuss their roles.
14.04 Discuss certification, licensure and registration for the cardiovascular technologist.
14.05 Identify the duties and responsibilities of the cardiovascular technologist.

15.0 USE BASIC MEDICAL ELECTRONICS AND MEDICAL INSTRUMENTATION--The student will be able to:

15.01 Identify the duties related to electronic monitoring and diagnostic testing of patient.
15.02 Demonstrate computer literacy skills as applied to cardiovascular practice.
15.03 Operate equipment used in diagnostic testing and physiological monitoring of patients.
15.04 Set up, calibrate and operate selected equipment in the cardiovascular laboratory.

16.0 DESCRIBE THE ROLE OF THE CARDIOVASCULAR TECHNOLOGIST IN CATASTROPHIC EVENT MANAGEMENT--The student will be able to:

16.01 Follow institutional catastrophic event protocol.
16.02 Respond to simulated emergency care situations encountered in a cardiovascular department.
16.03 Identify the components of the defibrillator.
16.04 Cite the indications for cardiac defibrillation and cardioversion.

17.0 DISCUSS THE PHARMACOLOGICAL ASPECTS OF CARDIOVASCULAR DRUGS--The student will be able to:

17.01 State the mechanism of action of selected cardiovascular drugs.
17.02 Identify and describe uses of pharmacological agents on an emergency "crash" cart.
17.03 Calculate drug dosages and mixtures.
17.04 Use needles and syringes in preparing medications for administration in simulated practice.
17.05 Describe intravenous fluid therapy maintenance.

18.0 PERFORM PATIENT CARE, RECORD PATIENT HISTORY AND PRACTICE EFFECTIVE COMMUNICATION--The student will be able to:

18.01 Perform patient identification procedures.
18.02 Examine patient chart and locate pertinent information.
18.03 Perform a patient history pertinent to the cardiovascular exam.
18.04 Practice patient care with emphasis on patient privacy, body mechanics, patient positions and patient transportation.

18.05 Measure vital signs and differentiate between normal and abnormal values.
18.06 Cite the indications for and name the methods of oxygen administration.
18.07 Perform the attachment of a regulator to and regulate the flow of oxygen from a tank or central system.
18.08 Perform suctioning technique in a simulated laboratory setting.
18.09 Recognize human behaviors indicative of anxiety.
18.10 Identify and develop effective communication and interpersonal relations skills.
18.11 Discuss approaches used in dealing with a variety of hospitalized persons.
18.12 Describe socio-cultural traits which may effect a person's hospital care.

One of the following sub-specialties must be added to the intended outcomes for both cardiovascular and cardiopulmonary. Additional sub-specialties may be included, as desired.

* For those programs which include the **INVASIVE CARDIOLOGY SUB-SPECIALTY**, the following student performance standards are necessary.

19.0 ASSIST IN ALL ASPECTS OF INVASIVE CARDIOVASCULAR TECHNIQUES WITH EMPHASIS ON CARDIAC CATHETERIZATION--The student will be able to:

19.01 Practice sterile technique as it applies to the cardiac catheterization set up and protocol.
19.02 Describe routine left heart and right heart catheterization set up and protocols.
19.03 Describe interventional procedures in the cardiac cath lab including, but not limited to, angioplasty, electrophysiology studies, valvuloplasty, biopsy and pericardiocentesis.
19.04 Describe catheter insertion techniques and assist physician with manipulation of catheterization instruments during the procedure.
19.05 Recognize cardiac anatomy through angiography and assess cardiac status from the data.
19.06 Recognize cardiac hemodynamic parameters and record and measure left and right heart pressures.
19.07 Determine cardiac output by Fick equation, thermodilution technique or green dye studies.
19.08 Perform calculations which include, but are not limited to, ejection fraction by planimetry, valve area using Gorlin formula and resistances.
19.09 Recognize presence of shunts by oximetry and/or dye curves and perform shunt calculations.
19.10 Discuss permanent and temporary pacemaker protocols and assist physician with implantation.
19.11 Correlate and calculate necessary data from right and left heart catheterization and assess the cardiac status from this information.

19.12 Demonstrate acceptable post-cath care of the catheterization site.
19.13 Identify arrhythmias which occur during cardiac catheterization.
19.14 Perform venipuncture to initiate intravenous fluid therapy.
19.15 Maintain and troubleshoot existing intravenous/intra-arterial lines.
19.16 Demonstrate knowledge of basic x-ray history and background.

20.0 PERFORM AND INTERPRET BLOOD GAS ANALYSES--The student will be able to:

20.01 Discuss blood gas and acid-base physiology.
20.02 Identify normal and abnormal blood gas values.
20.03 Interpret blood gas and acid-base data.
20.04 Describe quality control techniques in blood gas analyses.
20.05 Outline the steps in collecting arterial blood samples.

For those programs which include the NONINVASIVE CARDIOLOGY SUBSPECIALITY, these student performance standards are necessary.

21.0 PERFORM NONINVASIVE CARDIOVASCULAR TECHNIQUES WITH AN EMPHASIS ON ECHOCARDIOGRAPHY--The student will be able to:

21.01 Auscultate normal and abnormal heart sounds and relate abnormal findings to specific cardiac pathology.
21.02 Perform external pulse traces and relate abnormal findings to cardiac pathology.
21.03 Perform, measure and recognize normal and abnormal electrocardiograms.
21.04 Assist in performance of stress electrocardiography and explain indications, contraindications, positive and negative test results.
21.05 Assist in performance of ambulatory electrocardiography and explain indications and test results.
21.06 Describe the physics of ultrasound as it applies to echocardiography and cardiac Doppler.
21.07 Demonstrate function and use of noninvasive cardiology equipment.
21.08 Perform, measure and analyze M-Mode and Two-Dimensional echocardiograms.
21.09 Perform, measure and analyze Conventional and Color Flow Doppler exams.
21.10 Discuss the theory and practice of interventional Doppler echocardiography.

*For those programs which include the NONINVASIVE PERIPHERAL VASCULAR SUB-SPECIALITY, THE FOLLOWING STUDENT PERFORMANCE STANDARDS ARE NECESSARY.

22.0 PERFORM NONINVASIVE PERIPHERAL VASCULAR STUDIES--The student will be able to:

22.01 Discuss physics as it applies to noninvasive peripheral vascular studies including the Doppler.
22.02 Differentiate between normal and abnormal peripheral vascular data.
22.03 Perform noninvasive peripheral vascular evaluations including venous, arterial and cerebral vascular studies.

* For those Cardiopulmonary Technology programs the additional **PULMONARY COMPONENT MUST** be added with the following student performance standards.

23.0 PERFORM PULMONARY FUNCTION TESTING--The student will be able to:

23.01 Describe the function and use of pulmonary function equipment.
23.02 Cite the national standards for pulmonary functions testing.
23.03 Describe exercise and metabolic testing.
23.04 Perform calibration and quality control for pulmonary function equipment.
23.05 Describe distribution of ventilation, compliance and resistance measurements.
23.06 Perform pulmonary function tests including calculation and interpretation.
23.07 Perform spirometric measurements and procedures.
23.08 Perform lung volume measurements.
23.09 Perform lung diffusion measurements.

24.0 PERFORM AND INTERPRET BLOOD GAS ANALYSES--The student will be able to:

24.01 Discuss blood gas and acid-base physiology.
24.02 Identify normal and abnormal blood gas values.
24.03 Interpret blood gas and acid-base data.
24.04 Describe quality control techniques in blood gas analyses.
24.05 Outline the steps in collecting arterial blood samples.

* These are the student performance standards necessary for each subspecialty and pulmonary component.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Central Service Technology
Occupational Area: Health Science Education

PSAV

Program Numbers	**H170502**
CIP Number	0317.050200
Grade Level	30, 31
Length	450 hours
Certification	NURSING ED @5 TEC MED !7 !G PRAC NURSE @7 @G REG NURSE G

I. **MAJOR CONCEPTS/CONTENT:** This program is designed to prepare students for employment as supervisors, central supply (079.164-010), central supply workers, stock clerks: stock room or warehouse (58023345), sterilizers (599.585-010), central service technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, central services departmental organization and function; basic anatomy, physiology, microbiology and chemistry related to central service activities; quality assurance; infection control and isolation techniques, principles of safety; principles, methods and controls of sterilization processes; cleaning, processing, packaging, distributing, storing, and inventory control of sterile goods, instruments, trays, and equipment; medical terminology; surgical instrumentation; basic computer skills, interpersonal and job seeking skills, fundamentals of communication, and procurement of supplies and equipment.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES:** Skills and competencies are achieved through laboratory practice using supplies, instruments and equipment as found in central service departments. Instrumentation, sterilization processing, decontamination, inventory control and distribution are also presented. A working knowledge of computers should be achieved. Students should be rotated through the decontamination, preparation, sterilization, storage, and distribution areas. Clinical learning experiences are an integral part of this program.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

AFTER THE 1995-96 SCHOOL YEAR, THIS PROGRAM WILL NOT BE AVAILABLE AT THE SECONDARY LEVEL.

Health Occupations Students of America is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided these activities are considered an integral part of this program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction, OJT, is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, the instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; and a work station which reflects equipment, skills, and tasks relevant to the student's career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

When a student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which the student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The typical length of this program for the average achieving student is 150 hours.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student should be able to:

01.0 Use verbal and written communication.
02.0 Apply basic math skills.
03.0 Apply basic science skills.
04.0 Recognize basic principles of microbiology.
05.0 Receive, decontaminate, clean, prepare, disinfect and sterilize reusable items.
06.0 Demonstrate the use of sterilization process monitors, including temperature and frequency of appropriate chemical indicators and bacterial spore tests for all sterilizers.
07.0 Describe how central service is involved in controlling infections in hospitals.
08.0 Explain the purpose of Occupational Safety and Health Act (OSHA).
09.0 Demonstrate employability skills.
10.0 Describe supply distribution systems and the principles of inventory control.
11.0 Demonstrate the ability to recall and dispose of or reprocess outdated sterile supplies.
12.0 Interpret and apply medical terminology and anatomical terms as they relate to equipment and supplies issued by central service personnel.
13.0 Identify fundamentals of procurement skills.
14.0 Provide emergency care.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Central Service Technology
Secondary Number:
Postsecondary Number: H170502

01.0 USE VERBAL AND WRITTEN COMMUNICATIONS--The student will be able to:

01.01 Identify and use various forms of communications.
01.02 Identify barriers to communication.
01.03 Use basic medical terminology and approved abbreviations.
01.04 Demonstrate effective interpersonal relationships.
01.05 Maintain current documentation.
01.06 Demonstrate proper telephone usage.
01.07 Demonstrate basic computer skills.

02.0 APPLY BASIC MATH SKILLS--The student will be able to:

02.01 Read, interpret and report on graphs, charts and tables.
02.02 Make and use measurements in both traditional and metric units.
02.03 Convert from regular to 24 hour time.

03.0 APPLY BASIC SCIENCE SKILLS--The student will be able to:

03.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
03.02 Organize and communicate the results obtained by observation and experimentation.
03.03 Demonstrate ability to evaluate and draw conclusions.

04.0 RECOGNIZE BASIC PRINCIPLES OF MICROBIOLOGY--The student will be able to:

04.01 Identify the four main categories of microorganisms.
04.02 Describe three (3) life functions of bacteria.
04.03 Describe conditions affecting the growth of bacteria.
04.04 Describe special methods used to destroy harmful microorganisms.
04.05 List the helpful microorganisms.
04.06 Describe 5 ways the body controls the growth of pathogenic microorganisms.
04.07 Identify pathogenic microorganisms found in central service departments.
04.08 Identify terminology related to microbiology.

05.0 RECEIVE, DECONTAMINATE, CLEAN, PREPARE, DISINFECT AND STERILIZE REUSABLE ITEMS--The student will be able to:

05.01 Recognize the importance of thorough cleaning to the overall objectives of making items safe for patient use.
05.02 Explain how instruments, syringes, needles, rubber goods and equipment should be cleaned.
05.03 Describe how the ultrasonic machines and washer/sterilizers work.

05.03 Describe how the ultrasonic machines and washer/sterilizers work.
05.04 Explain the importance of following manufacturers' instructions in cleaning.
05.05 Explain at least three reasons why detergents are preferred over soaps.
05.06 Explain the primary objectives in selecting the correct packaging materials.
05.07 Demonstrate the wrapping of procedures trays, instruments and other supplies.
05.08 Describe how sterile supplies should be handled.
05.09 Explain the principles involved in loading different kinds of wrapped packs or packages into a sterilizer to be assured of steam or gas penetration.
05.10 Recognize equipment malfunction and list corrective actions.
05.11 Identify basic surgical instruments and accessories.

06.0 DEMONSTRATE THE USE OF STERILIZATION PROCESS MONITORS, INCLUDING TEMPERATURE AND FREQUENCY OF APPROPRIATE CHEMICAL INDICATORS AND BACTERIAL SPORE TESTS FOR ALL STERILIZERS--The student will be able to:

06.01 List the guidelines for the safe use of ethylene oxide sterilization.
06.02 Name the two spores used for spore testing and identify which types of sterilizers they are used for.
06.03 Explain the purpose and proper procedure for performing the residual of air test in a vacuum sterilizer and other chemical and biological indicators.
06.04 Demonstrate the basic reading of temperature and pressure recordings.
06.05 Explain the reasons for biological monitoring.

07.0 DESCRIBE HOW CENTRAL SERVICE IS INVOLVED IN CONTROLLING INFECTIONS IN HOSPITALS--The student will be able to:

07.01 Describe the proper dress code in the clean and soiled sections of CS and outside of CS department in hospital.
07.02 Explain infection control practices in C.S. i.e. traffic control patterns, personal health, work flow and housekeeping.
07.03 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
07.04 Explain the importance of handwashing in controlling infection, and how bacteria are transmitted from one person to another.
07.05 Describe nosocomial infections.
07.06 Describe the types of isolation.
07.07 Describe the organization and functions of C.S.
07.08 Describe the organizational patterns of health care facilities.

08.0 EXPLAIN THE PURPOSE OF OCCUPATIONAL SAFETY AND HEALTH ACT--The student will be able to:

08.01 Describe how employees are protected under OSHA.
08.02 Describe at least six different things that can cause accidents in C.S.

08.03 Describe some of the methods of preventing the situations that can lead to accidents.
08.04 Describe the role preventive maintenance plays in patient and personnel safety in the hospital.
08.05 Describe some of the fire safety concerns in a modern hospital.
08.06 Explain body mechanics and demonstrate proper lifting techniques.
08.07 Explain the purpose of Florida's "Right to Know" law and its provisions.
08.08 Recognize the importance of filling out incident reports and reports to the Emergency Room.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate acceptable employee health habits.

10.0 DESCRIBE SUPPLY DISTRIBUTION SYSTEMS AND THE PRINCIPLES OF INVENTORY CONTROL--The student will be able to:

10.01 List five (5) reasons for inventory control.
10.02 Compare the advantages and disadvantages of four distribution methods.
10.03 Define the benefits of computer inventory.
10.04 Process a requisition marked "state" - locate article, price, etc.

11.0 DEMONSTRATE THE ABILITY TO RECALL AND DISPOSE OF OR REPROCESS STERILE SUPPLIES--The student will be able to:

11.01 Explain the factors that effect how long a package can be considered safe for use.
11.02 State the methods of determining expiration dates.
11.03 List the steps in reprocessing outdated hospital packaged items.
11.04 List four (4) conditions that would make a product unsafe for use.
11.05 Describe the shelf life of stored sterile goods.
11.06 Describe the methods of reprocessing.

12.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY AND ANATOMICAL TERMS AS THEY RELATE TO EQUIPMENT AND SUPPLIES ISSUED BY CENTRAL SERVICE PERSONNEL--The student will be able to:

12.01 Identify components for medical terms.

12.02 Identify two (2) functions of each body system.
12.03 Use acceptable medical terminology.
12.04 Relate anatomical concepts to orthopedic devices and other supplies and equipment issued by the C.S. Department.

13.0 IDENTIFY FUNDAMENTALS OF PROCUREMENT SKILLS--The student will be able to:

13.01 Describe procurement system.
13.02 Communicate with other hospitals for procurement of supplies and equipment.
13.03 Describe several different methods of procurement of supplies.
13.04 Describe basics of receiving items.

14.0 PROVIDE EMERGENCY CARE--The student will be able to:

14.01 Perform emergency measures, including BLS (Healthcare Providers) and the management of an obstructed airway.
14.02 Identify emergency evacuation procedure.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
15.02 Identify community resources and services available to individuals with diseases caused by blood borne pathogens.
15.03 Identify "at-risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
15.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients including those with blood borne disease, following Center for Disease Control (CDC) Guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS.

Florida Department of Education
CLUSTER CURRICULUM FRAMEWORK

Cluster Title:	Clinical Laboratory	
Cluster Type:	Job Preparatory	
Occupational Area:	Health Science Education	
Components:	Core, Five Programs, And Five Occupational Completion Points	
	PSAV	PSV
Grade Level:	30, 31	College
Facility Code:	252	
VSO:	HOSA	HOSA
Coop Method:	No	No
Apprenticeship:	No	No

I. **PURPOSE**: The purpose of the programs in this cluster is to prepare students for employment or advanced training in the clinical laboratory. The programs in the cluster also provide supplemental training for persons previously or currently employed in the clinical laboratory.

This cluster of programs focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

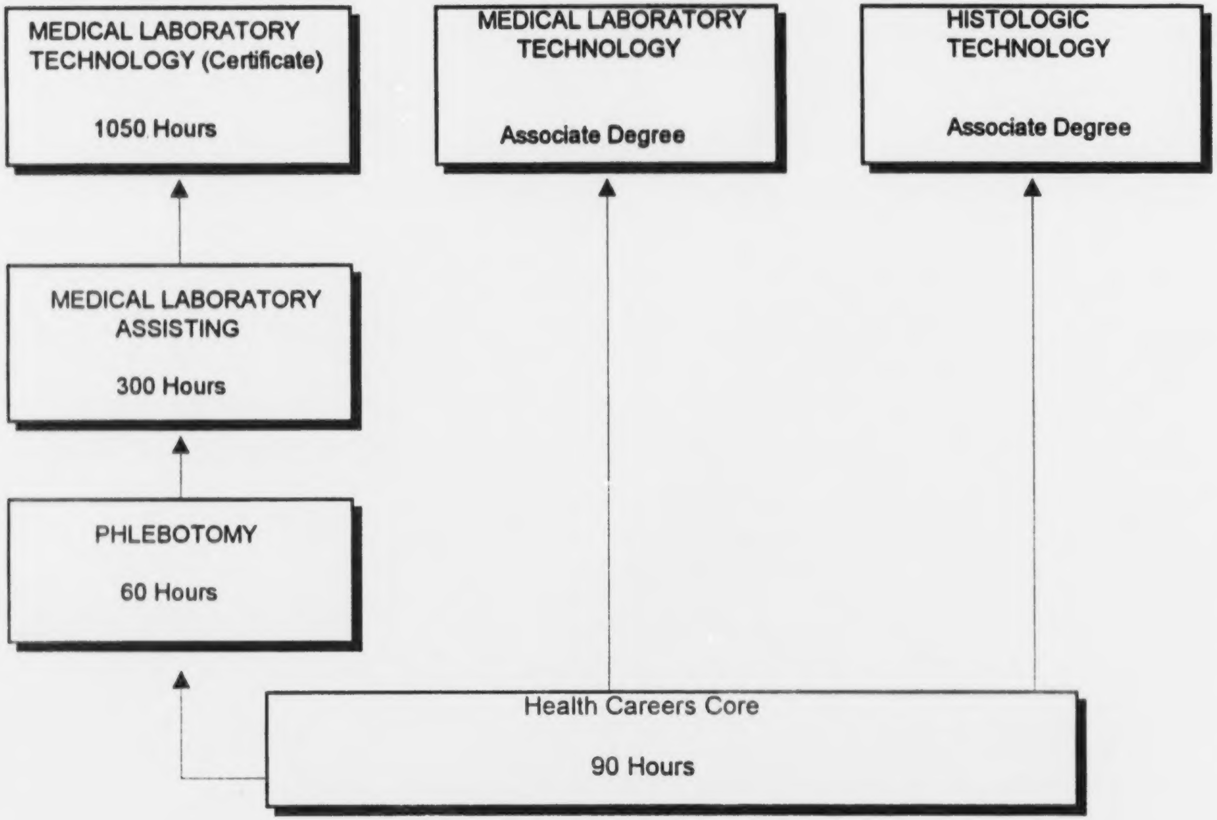
II. **CLUSTER STRUCTURE**: This cluster is a planned sequence of instruction consisting of a core, five programs and five occupational completion points. When the recommended sequence is followed, the structure will allow students to complete specified portions of the program for employment or remain for advanced training. A student who completes the applicable competencies at any occupational completion point may either continue with the training program or become an occupational completer.

This cluster meets the goals of TECH PREP and is based on the model developed by the Allied Health Articulation Task Force.

Students must complete the core, or demonstrate the mastery of skills standards contained in the core, before advancing in either of the programs:

PHLEBOTOMY
MEDICAL LABORATORY ASSISTING 95-96
MEDICAL LABORATORY TECHNOLOGY (CERTIFICATE)
MEDICAL LABORATORY TECHNOLOGY (ASSOCIATE DEGREE)
HISTOLOGIC TECHNOLOGY

CLINICAL LABORATORY CLUSTER



MEDICAL LABORATORY TECHNOLOGY (Certificate)

1050 Hours

MEDICAL LABORATORY TECHNOLOGY

Associate Degree

HISTOLOGIC TECHNOLOGY

Associate Degree

MEDICAL LABORATORY ASSISTING

300 Hours

PHLEBOTOMY

60 Hours

Health Careers Core

90 Hours

III. **LABORATORY ACTIVITIES**: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

IV. **SPECIAL NOTES**: Duly chartered medical laboratory professional society student organizations and/or Health Occupations Students of America, Inc.(HOSA), are the appropriate organizations for providing leadership training experience and for reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum, SBR 6A-6.064.

The programs should be accredited by:

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

8410 W. Bryn Moore Ave.; Suite 670
Chicago, Illinois 60631
(312) 714-8800

or

Commission on Accreditation of Allied Health Education Programs (CAAHEP)

515 North State Street, Suite 7530
Chicago, Illinois 60610-4377
(312) 464-4623

or

any other agency as specified by the Agency for Health Care Administration (AHCA), Board of Clinical Laboratory Personnel Chapter 483 F.S., Rule 590 FAC,"Florida Clinical Laboratory Personnel Law". The graduate of a board approved program should be prepared to take the appropriate licensing examination to practice in Florida and an appropriate national certifying examination. For further information contact:

AHCA Board of Clinical Laboratory Personnel
1940 North Monroe Street
Tallahassee, FL 32399-2200
(904) 487-2140

Planned and supervised instructional activities must be provided through one or more of the following: (1) directed laboratory experience, (2) student projects, (3) placement for clinical experience.

The programs in this cluster may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643, F.S.

The programs within the Clinical Laboratory cluster meet the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes.

In accordance with Rule 6A-10.040, FAC, the minimum basic skills grade level required for postsecondary adult vocational students to exit the programs in this cluster are listed at the program level or at the occupational completion points within the program. These grade level numbers correspond to a grade equivalent score obtained on one of the state designated basic skills examinations. If a student does meet the basic skills level required for completion from the program, remediation should be provided concurrently in the System for Applied Individualized Learning (SAIL) lab prior to admission in an Adult Basic Education (ABE) setting.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for the programs in this cluster and is printed in a supplement to this document.

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Florida Department of Education
INTENDED OUTCOMES

Program Title: PHLEBOTOMY 95-96

	PSAV
Program Numbers	**H170302**
CIP Number	0317.030101
Grade Level	30, 31
Length	150 hours
Certification	TEC MED !7 !G
	LAB TEC @7 G
	LAB ASST @7 G
	MED ASST @7 G
	PARAMEDIC @7 G
	REG NURSE G
	PRAC NURSE @7 @G
Basic Skills	
Math	9
Language	11
Reading	11

MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as all other health service workers (phlebotomists) (66099444) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, communication, leadership, human relations, and employability skills; performance of safe and efficient work practices in obtaining adequate and correct blood specimens by capillary or venipuncture on adults, children and neonates; maintaining the integrity of the specimen in relation to the test to be performed; preparing blood smears; labeling specimens accurately and completely; collecting timed specimens; promoting the comfort and well-being of the patient while performing blood collecting duties; observing safety policies and procedures; medical terminology; emergency procedures including CPR (Heartsaver); delivering a variety of clinical specimens to the clinical laboratory; sorting and recording specimens received in the laboratory; centrifuging specimens and preparing aliquots of samples according to the designated protocol; distributing samples to appropriate laboratory sections; and preparing collection trays for specimen procurement.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

PHLEBOTOMY 95-96 (12-19)

12.0 Demonstrate accepted professional, communication and interpersonal skills.
13.0 Discuss phlebotomy in relation to the health care setting.
14.0 Identify the anatomic structure and function of body systems in relation to services performed by phlebotomist.
15.0 Recognize and identify collection reagents supplies, equipment and interfering chemical substances.
16.0 Demonstrate skills and knowledge necessary to perform phlebotomy.
17.0 Practice infection control following universal precautions.
18.0 Practice accepted procedures of transporting, accessioning and processing specimens.
19.0 Practice quality assurance and safety.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Phlebotomy
Secondary Number:	
Postsecondary Number:	H170302

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.

07.02 Demonstrate knowledge of surgical asepsis.

07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.

08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.

09.02 Secure information about a job.

09.03 Identify documents that may be required when applying for a job.

09.04 Complete a job application form correctly.

09.05 Demonstrate competence in job interview techniques.

09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

09.07 Identify acceptable work habits.

09.08 Demonstrate knowledge of how to make job changes appropriately.

09.09 Demonstrate desirable health habits.

09.10 Recognize appropriate affective/professional behavior.

09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.

10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PHLEBOTOMY: The intended outcomes (12-19) complete the occupational completion point of Phlebotomy.

12.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:

12.01 Demonstrate the appropriate professional behavior of a phlebotomist.
12.03 Explain to the patient the procedure to be used in specimen collection.
12.05 Follow approved procedure for labeling of specimens.
12.08 Explain in detail the importance of identifying patients correctly when drawing blood.

13.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

13.01 List, classify and discuss various departments and services within the health care setting with which the phlebotomist must interact to obtain laboratory specimens from patients.
13.02 Identify the major departments/sections with the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
13.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

14.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

14.01 Describe and define major body systems with emphasis on the circulatory system.
14.02 List and describe the main superficial veins used in performing venipuncture.
14.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).
14.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

15.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

15.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.

15.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.

15.03 Identify and discuss proper use of supplies used in collecting microspecimens.

15.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.

15.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.

15.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.

15.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

16.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY--The student will be able to:

16.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.

16.02 Discuss/perform methods for facilitating capillary/venipuncture collection.

16.03 Demonstrate knowledge of established protocol for patient and specimen identification.

16.04 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.

16.05 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.

16.06 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and appropriate patient care.

16.07 Describe the correct order of draw during capillary and venipuncture.

16.08 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.

16.09 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.

16.10 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.

16.11 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation.

17.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS--The student will be able to:

17.01 Define the term "nosocomial infection."
17.02 Describe/practice procedures for infection prevention.
17.03 Discuss/perform isolation procedures.
17.04 Identify potential routes of infection.

18.0 PRACTICE ACCEPTED PROCEDURES OF TRANSPORTING, ACCESSIONING AND PROCESSING SPECIMENS--The student will be able to:

18.01 Describe routine procedures for transporting and processing specimens.
18.02 Describe the significance of time constraints for specimen collection and delivery.
18.03 Demonstrate knowledge of accessioning procedures.
18.04 Prepare aliquot(s) of specimen or component(s) for analysis according to specimen type and analysis to be performed.
18.05 Follow protocol for accepting verbal test orders.

19.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:

19.01 Distinguish and perform procedures which ensure reliability of test results when collecting blood specimens.
19.02 Demonstrate knowledge of and practice appropriate patient safety.
19.03 Practice laboratory safety in accordance with established procedures.
19.04 Follow documentation procedures for work related accidents.

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Florida Department of Education
INTENDED OUTCOMES

Program Title: Medical Laboratory Assisting 95-96

	PSAV
Program Numbers	**H170306**
CIP Number	0317.030401
Grade Level	30, 31
Length	450 hours
Certification	TEC MED !7 !G LAB TEC @7 G LAB ASST @7 G
Basic Skills	
Math	9
Language	11
Reading	11

MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as medical/clinical lab technicians (32905207), or medical laboratory aides or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, communication, interpersonal and professional skills, appropriate scientific principles of microbiology, chemistry, physics, anatomy and physiology integrated into skill development and clinical learning.

NOTE: Electrocardiograph may also be included in the curriculum content of the Medical Laboratory Assisting program. Refer to the Electrocardiograph Technology Curriculum Framework (0317020300) for the student performance standards (12-17) required for the additional employability skills in electrocardiograph.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.

06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.

***OCCUPATIONAL COMPLETION POINT - DATA CODE A* (12.0-19.0)**
PHLEBOTOMY TECHNICIAN - Industry Title

12.0 Demonstrate accepted professional, communication and interpersonal skills.
13.0 Discuss phlebotomy in relation to the health care setting.
14.0 Identify the anatomic structure and function of body systems in relation to services performed by phlebotomist.
15.0 Recognize and identify collection reagents supplies, equipment and interfering chemical substances.
16.0 Demonstrate skills and knowledge necessary to perform phlebotomy.
17.0 Practice infection control following universal precautions.
18.0 Practice accepted procedures of transporting, accessioning and processing specimens.
19.0 Practice quality assurance and safety.

***OCCUPATIONAL COMPLETION POINT - DATA CODE B* (20.0 - 24.0)**
MEDICAL LAB ASSISTANT - Industry Title

20.0 Demonstrate basic knowledge of microbiology, perform clinical laboratory "WAIVED TESTS".
21.0 Demonstrate basic knowledge of urinalysis, perform clinical laboratory "WAIVED TESTS".
22.0 Demonstrate basic knowledge of clinical chemistry, perform clinical laboratory "WAIVED TESTS".
23.0 Demonstrate basic knowledge of hematology, perform clinical laboratory "WAIVED TESTS".
24.0 Successfully complete learning experiences in the clinical setting.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Medical Laboratory Assisting 95-96
Secondary Number:
Postsecondary Number: H170306

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis..

07.02 Demonstrate knowledge of surgical asepsis.

07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.

08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.

09.02 Secure information about a job.

09.03 Identify documents that may be required when applying for a job.

09.04 Complete a job application form correctly.

09.05 Demonstrate competence in job interview techniques.

09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

09.07 Identify acceptable work habits.

09.08 Demonstrate knowledge of how to make job changes appropriately.

09.09 Demonstrate desirable health habits.

09.10 Recognize appropriate affective/professional behavior.

09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.

10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PHLEBOTOMY (12-19)

12.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:

12.01 Demonstrate the appropriate professional behavior of a phlebotomist.
12.03 Explain to the patient the procedure to be used in specimen collection.
12.05 Follow approved procedure for labeling of specimens.
12.08 Explain in detail the importance of identifying patients correctly when drawing blood.

13.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

13.01 List, classify and discuss various departments and services within the health care setting with which the phlebotomist must interact to obtain laboratory specimens from patients.
13.02 Identify the major departments/sections within the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
13.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

14.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

14.01 Describe and define major body systems with emphasis on the circulatory system.
14.02 List and describe the main superficial veins used in performing venipuncture.
14.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).
14.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

15.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

15.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

15.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
15.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.
15.03 Identify and discuss proper use of supplies used in collecting microspecimens.
15.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
15.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.
15.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.
15.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

16.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY--The student will be able to:

16.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.
16.02 Discuss/perform methods for facilitating capillary/venipuncture collection.
16.03 Demonstrate knowledge of established protocol for patient and specimen identification.
16.04 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.
16.05 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.
16.06 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and patient care.
16.07 Describe the correct order of draw during capillary and venipuncture.
16.08 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.
16.09 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.
16.10 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.
16.11 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation

17.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS--The student will be able to:

17.01 Define the term "nosocomial infection."

18.0 PRACTICE ACCEPTED PROCEDURES OF TRANSPORTING, ACCESSIONING AND PROCESSING SPECIMENS--The student will be able to:

18.01 Describe routine procedures for transporting and processing specimens.
18.02 Describe the significance of time constraints for specimen collection and delivery.
18.03 Demonstrate knowledge of accessioning procedures.
18.04 Prepare aliquot(s) of specimen or component(s) for analysis according to specimen type and analysis to be performed.
18.05 Follow protocol for accepting verbal test orders.

19.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:

19.01 Distinguish and perform procedures which ensure reliability of test results when collecting blood specimens.
19.02 Demonstrate knowledge of and practice appropriate patient safety.
19.03 Practice laboratory safety in accordance with established procedures.
19.04 Follow documentation procedures for work related accidents.

MEDICAL LABORATORY ASSISTING: The following intended outcomes (20-24), in addition to the Phlebotomy intended outcomes (12-19), complete the occupational completion point of Medical Laboratory Assisting.

NOTE: Electrocardiograph may also be included in the curriculum content of the Medical Laboratory Assisting program. Refer to the Electrocardiograph Technology Curriculum Framework (0317020300) for the student performance standards (12-17) required for the additional employability skills in electrocardiograph.

20.0 DEMONSTRATE BASIC KNOWLEDGE OF MICROBIOLOGY, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

20.01 Perform techniques of microbiology related to disinfection techniques.
20.02 Discuss techniques of microbiology related to isolation techniques.
20.03 Perform techniques of microbiology related to sterilization techniques.
20.04 Perform techniques of microbiology related to preparation, staining.
20.05 Understand the microscopic examination of gram stains.
20.06 Discuss techniques of microbiology related to inoculation and transfer of cultures.
20.07 Perform basic techniques of microbiology
20.08 Perform techniques of microbiology related to preparation of artificial culture media.
20.09 Discuss techniques of microbiology related to principles and use of the microscope.

21.0 DEMONSTRATE BASIC KNOWLEDGE OF URINALYSIS, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

21.01 Discuss urinalysis techniques related to normal and abnormal components of the urine.
21.02 Perform urinalysis techniques related to collection and preservation of specimens.
21.03 Discuss urinalysis techniques related to physical properties of urine and related odors, color.
21.04 Perform urinalysis techniques related to dipstick urine pH and describe clinical significance.
21.05 Discuss urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometer and refractometer.
21.06 Perform dipstick or tablet (nonautomated) urinalysis techniques related to performance of chemical tests.
21.07 Discuss urinalysis techniques related to microscopic identification of significant elements.
21.08 Perform urinalysis techniques related to principles and use of centrifuge.

22.0 DEMONSTRATE BASIC KNOWLEDGE OF CLINICAL CHEMISTRY, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

22.01 Perform techniques of clinical chemistry related to metric measurement.
22.02 Perform techniques of clinical chemistry related to laboratory glassware and equipment.
22.03 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.
22.04 Discuss techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.
22.05 Discuss techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.
22.06 Discuss techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.
22.07 Discuss basic techniques of clinical chemistry related to normal and abnormal physiology.

23.0 DEMONSTRATE BASIC KNOWLEDGE OF HEMATOLOGY, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

23.01 Discuss techniques of hematology related to counting formed elements of blood.
23.02 Perform techniques of hematology related to preparation and staining.
23.03 Discuss techniques of cell differential microscopic examination of blood films.
23.04 Perform techniques of hematology related to spun hematocrit tests.
23.05 Discuss techniques of hematology related to bleeding and clotting times.

23.06 Perform techniques of hematology related to hemoglobin tests.
23.07 Discuss techniques of hematology related to calculation of red blood cell indices.
23.08 Discuss basic techniques of hematology related to normal and abnormal physiology.

24.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING--The student will be able to:

24.01 Observe skills outlined in outcomes 1-11.
24.02 Complete clinical rotations, performing the following waived tests: dipstick or tablet urinalysis (nonautomated); fecal occult blood; ovulation tests; urine pregnancy tests; sedimentation rate (nonautomated); hemoglobin by copper sulfate method and by single analyte instrument (Hemocue); blood glucose performed on an FDA approved device; and spun hematocrit.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Medical Laboratory Technology (Certificate) 95-96

PSAV

Program Numbers	**H170307**
CIP Number	0317.030501
Grade Level	30, 31
Length	1500 hours
Certification	TEC MED !7 !G LAB TEC @7 G LAB ASST @7 G
Basic Skills	
Math	9
Language	11
Reading	11

MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as medical lab technicians (078.381-014), medical/clinical laboratory technicians (32902208) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, didactic and laboratory performance of routine procedures in hematology, immunology, urinalysis, immunohematology, microbiology and clinical chemistry including the use of common laboratory instruments. A clinical component is a necessary element of this program.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OCCUPATIONAL COMPLETION POINT - DATA CODE A (12.0 - 19.0)
PHLEBOTOMY TECHNICIAN - Industry Title

12.0 Demonstrate accepted professional, communication and interpersonal skills.
13.0 Discuss phlebotomy in relation to the health care setting.
14.0 Identify the anatomic structure and function of body systems in relation to services performed by phlebotomist.
15.0 Recognize and identify collection reagents supplies, equipment and interfering chemical substances.
16.0 Demonstrate skills and knowledge necessary to perform phlebotomy.
17.0 Practice infection control following universal precautions.
18.0 Practice accepted procedures of transporting, accessioning and processing specimens.
19.0 Practice quality assurance and safety.

OCCUPATIONAL COMPLETION POINT - DATA CODE B (20.0 - 24.0)
MEDICAL LAB ASSISTANT - Industry Title

20.0 Demonstrate basic knowledge of microbiology, perform clinical laboratory "WAIVED TESTS".
21.0 Demonstrate basic knowledge of urinalysis, perform clinical laboratory "WAIVED TESTS".
22.0 Demonstrate basic knowledge of clinical chemistry, perform clinical laboratory "WAIVED TESTS".
23.0 Demonstrate basic knowledge of hematology, perform clinical laboratory "WAIVED TESTS".
24.0 Successfully complete learning experiences in the clinical setting.

OCCUPATIONAL COMPLETION POINT - DATA CODE C (25.0 - 36.0)
MEDICAL/CLINICAL LABORATORY TECHNICIAN - OES Code 32905212

25.0 Discuss anatomy and physiology of the human body as it relates to the field of Medical Laboratory Technology.
26.0 Discuss the general responsibilities and functions encountered by a Medical Technician.
27.0 Apply quality assurance principles and safety protocols.
28.0 Demonstrate knowledge of urinalysis principles and procedures.
29.0 Demonstrate knowledge of hematological principles and procedures.
30.0 Demonstrate knowledge of hemostasis and related diagnostic principles and procedures.
31.0 Demonstrate knowledge of microbiological principles and procedures.
32.0 Demonstrate knowledge of clinical chemistry principles and procedures.
33.0 Demonstrate knowledge of immunohematological principles and procedures.
34.0 Demonstrate knowledge of immunological/serological principles and procedures.
35.0 Demonstrate knowledge of principles and procedures of body fluid analysis.
36.0 Demonstrate knowledge of the operation of computer systems.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Medical Laboratory Technology (Certificate)
Secondary Number:
Postsecondary Number: H170307

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

- 01.01 Identify the basic components of the health care delivery system.
- 01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
- 01.03 Describe the composition and functions of a health care team.
- 01.04 Identify the general roles and responsibilities of the individual members of the health care team.
- 01.05 Develop a basic understanding of human needs throughout the lifespan.
- 01.06 Explain the importance of maintaining professional competence through continuing education.
- 01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 02.01 Develop basic listening skills.
- 02.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 02.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 02.04 Respond to verbal and non-verbal cues.
- 02.05 Compose written communication using correct spelling, grammar, and format.
- 02.06 Use appropriate medical terminology and abbreviations.
- 02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
- 02.08 Recognize the importance of patient/client education regarding health care.
- 02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
- 02.10 Demonstrate telephone usage including taking messages.
- 02.11 Demonstrate ability to give and follow directions.
- 02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PHLEBOTOMY (12-19)

12.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:

12.05 Follow approved procedure for labeling of specimens.
12.01 Demonstrate the appropriate professional behavior of a phlebotomist.
12.03 Explain to the patient the procedure to be used in specimen collection.
12.08 Explain in detail the importance of identifying patients correctly when drawing blood.

13.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

13.01 List, classify and discuss various departments and services within the health care setting with which the phlebotomist must interact to obtain laboratory specimens from patients.
13.02 Identify the major departments/sections within the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
13.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

14.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

14.01 Describe and define major body systems with emphasis on the circulatory system.
14.02 List and describe the main superficial veins used in performing venipuncture.
14.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).
14.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

15.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

15.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
15.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.
15.03 Identify and discuss proper use of supplies used in collecting microspecimens.
15.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
15.05 Describe the types of patients' specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.
15.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.
15.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

16.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY--The student will be able to:

16.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.
16.02 Discuss/perform methods for facilitating capillary/venipuncture collection.
16.03 Demonstrate knowledge of established protocol for patient and specimen identification.
16.04 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.
16.05 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.
16.06 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and patient care.
16.07 Describe the correct order of draw during capillary and venipuncture.
16.08 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.
16.09 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.
16.10 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.
16.11 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation.

17.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS--The student will be able to:

17.01 Define the term "nosocomial infection."
17.02 Describe/practice procedures for infection prevention.
17.03 Discuss/perform isolation procedures.

24.02 Complete clinical rotations, performing the following waived tests: dipstick or tablet urinalysis (nonautomated); fecal occult blood; ovulation tests; urine pregnancy tests; sedimentation rate (nonautomated); hemoglobin by copper sulfate method and by single analyte instrument (Hemocue); blood glucose performed on an FDA approved device; and spun hematocrit.

MEDICAL LABORATORY TECHNOLOGY (CERTIFICATE): the following intended outcomes (25-36) complete the occupational completion point of Medical Laboratory Technology (Certificate program.)

25.0 DISCUSS ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY AS IT RELATES TO THE FIELD OF MEDICAL LABORATORY TECHNOLOGY--The student will be able to:

25.01 Identify the major body systems and their anatomical features.
25.02 Explain the physiological processes in the human system necessary to influence and maintain homeostasis.

26.0 DISCUSS THE GENERAL RESPONSIBILITIES AND FUNCTIONS ENCOUNTERED BY A MEDICAL TECHNICIAN--The students will be able to:

26.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
26.02 Organize and communicate the results obtained by observation and experimentation.
26.03 Demonstrate ability to evaluate and draw conclusions.
26.04 Demonstrate knowledge of anatomy and physiology of body systems.
26.05 Demonstrate ability to report observations in written or oral form.
26.06 Discuss the licensure and certification requirements of the major classifications of clinical laboratory personnel.

27.0 APPLY QUALITY ASSURANCE PRINCIPLES AND SAFETY PROTOCOLS--The student will be able to:

27.01 Recognize specimen suitability and determine need for rejection/recollection using factors described in clinical protocol.
27.02 Describe special procedures for transporting and processing specimens.
27.03 Describe clinical laboratory role in providing quality assurance in laboratory testing, reporting, and use and maintenance of equipment.
27.04 Demonstrate all required calibration procedures.
27.05 Demonstrate and record all quality control procedures required for the tests assayed and recognize unacceptable results.
27.06 Identify and report problems encountered in daily quality control according to standard operating procedures.
27.07 Adhere to current OSHA regulations regarding laboratory hazards.

28.0 DEMONSTRATE KNOWLEDGE OF URINALYSIS PRINCIPLES AND PROCEDURES--The student will be able to:

28.01 Discuss the renal system as it relates to urinalysis.
28.02 Describe renal function tests.
28.03 Describe principles of and perform routine physical and clinical analyses on urine.
28.04 Prepare, identify and quantitate urine microscopies.
28.05 Correlate abnormal physical, chemical and microscopic urine results with associated pathological conditions.
28.06 Describe collection procedures for random and timed urine specimens.

29.0 DEMONSTRATE KNOWLEDGE OF HEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

29.01 Discuss the organs, cells and cellular interaction of the lymphoid and reticuloendothelial systems.
29.02 Discuss the principles of and perform routine hematology procedures.
29.03 Differentiate normal from abnormal blood cell morphology and relate the abnormal findings to the commonly referenced hematological disorders.
29.04 Identify normal and abnormal molecular structure of hemoglobin and the more common hemoglobinopathies.

30.0 DEMONSTRATE KNOWLEDGE OF HEMOSTASIS AND RELATED DIAGNOSTIC PRINCIPLES AND PROCEDURES--The student will be able to:

30.01 Discuss and define the interactive systems necessary to maintain hemostasis.
30.02 Describe the principles of and perform routine testing used in the evaluation of the vascular, platelet, coagulation factor and fibrinolytic systems.
30.03 Discuss conditions and commonly referenced diseases related to abnormal hemostasis.

31.0 DEMONSTRATE KNOWLEDGE OF MICROBIOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

31.01 Discuss microbial taxonomy and classification.
31.02 Discuss bacterial metabolism, reproduction, cell structures and their functions.
31.03 Discuss and perform disinfection and sterilization techniques.
31.04 Discuss classification, composition and preparation of culture media.
31.05 Discuss specimen collection, handling, and culturing techniques for urine, stool, wound, throat, body fluids, blood and exudates.
31.06 Demonstrate bacteriologic culture techniques necessary for isolation and identification of organisms.
31.07 Demonstrate and interpret antibiotic susceptibility tests.
31.08 Discuss diseases associated with selected anaerobic and aerobic bacteria.

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31.09 Identify commonly encountered aerobic bacteria through morphological, physical and biochemical properties.
31.10 Discuss the principles of, prepare, and interpret Gram stains.
31.11 Discuss collection and handling of specimens for fungal, mycobacterial and viral specimens.
31.12 Prepare and examine specimens, and identify ova and parasites as indicated.

32.0 DEMONSTRATE KNOWLEDGE OF CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES--The student will be able to:

32.01 Discuss the renal system and related chemistry tests.
32.02 Discuss principles of and perform common renal function tests.
32.03 Discuss carbohydrate, protein and lipid metabolism.
32.04 Discuss principles of and perform commonly ordered tests related to carbohydrate, protein and lipid metabolism.
32.05 Discuss the liver and its functions as related to chemistry tests.
32.06 Discuss principles of and perform commonly ordered liver function tests.
32.07 Discuss enzyme classification, origin, activity and function.
32.08 Discuss principles of and perform commonly ordered enzyme procedures.
32.09 Discuss electrolyte balance as related to health and disease.
32.10 Discuss principles of and perform electrolyte analyses.
32.11 Discuss the physiology of the endocrine system and the principal tests used to determine endocrine function.
32.12 Discuss the role of the laboratory in therapeutic drug monitoring and toxicology.
32.13 Discuss and perform general electrophoresis techniques.
32.14 Demonstrate knowledge of principles of instrumentation as related to the clinical chemistry laboratory.

33.0 DEMONSTRATE KNOWLEDGE OF IMMUNOHEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

33.01 Discuss basic genetics of the antigen system.
33.02 Discuss the ABO, Rh and other blood group systems.
33.03 Perform antigen and antibody testing to establish ABO group and Rh.
33.04 Discuss and perform routine compatibility testing.
33.05 Discuss and perform antibody screening and identification of common single antibodies.
33.06 Discuss donor interview, criteria for selection, phlebotomy preparation, and donor blood processing.
33.07 Identify symptoms of and required laboratory protocol for handling suspected transfusion reactions.
33.08 Discuss immune hemolytic diseases commonly investigated through immunohematological procedures.
33.09 Discuss multiple antibody identification procedures.
33.10 Discuss appropriate absorption and elution techniques.
33.11 Discuss component collection and preparation.

34.0 DEMONSTRATE KNOWLEDGE OF IMMUNOLOGICAL/SEROLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

34.01 Discuss the immune system and the normal immune response.
34.02 Discuss physical and chemical properties of immunoglobulins and complement and their reactions in vitro.
34.03 Discuss the principle of and perform the basic agglutination, flocculation and precipitation procedures in serology.
34.04 Discuss principles of complement fixation, immunoelectrophoresis and enzyme immunoassay.
34.05 Discuss the clinical significance of the commonly performed serological tests.

35.0 DEMONSTRATE KNOWLEDGE OF PRINCIPLES AND PROCEDURES OF BODY FLUID ANALYSIS--The student will be able to:

35.01 Define and discuss the differences between transudate and exudates.
35.02 Discuss miscellaneous body fluids to include cerebral spinal, seminal and joint fluids.
35.03 Demonstrate physical, chemical and microscopic evaluations of common body fluids.

36.0 DEMONSTRATE KNOWLEDGE OF THE OPERATION OF COMPUTER SYSTEMS--The student will be able to:

36.01 Discuss the role of computer systems in laboratory data management.
36.02 Demonstrate knowledge of common computer terminology.
36.03 Demonstrate entry level computer operations for specimen accessioning, data reporting, and quality control recording.
36.04 Demonstrate entry level operational skills in the use of computer-interfaced analytical instrumentation.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Medical Laboratory Technology (Associate Degree)

PSV

CIP Number	0317.030900
Grade Level	College
Length	Associate Degree/76 credit hours

MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as medical/clinical laboratory technologist (32902212), or medical laboratory technologists (associate degree) or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to specific techniques and instruments, identification of factors directly affecting procedures and results, confirmation of results and monitoring quality control programs within pre-determined parameters, and correction of errors using pre-set standards. A clinical component is a necessary element of this program.

The standard credit hour length for this program is 76 credit hours according to Rule 6A-14.030.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

PHLEBOTOMY (12-19)

12.0 Demonstrate accepted professional, communication and interpersonal skills.
13.0 Discuss phlebotomy in relation to the health care setting.
14.0 Identify the anatomic structure and function of body systems in relation to services performed by phlebotomist.
15.0 Recognize and identify collection reagents supplies, equipment and interfering chemical substances.
16.0 Demonstrate skills and knowledge necessary to perform phlebotomy.
17.0 Practice infection control following universal precautions.
18.0 Practice accepted procedures of transporting, accessioning and processing specimens.
19.0 Practice quality assurance and safety.

MEDICAL LABORATORY ASSISTING (20-24)

20.0 Demonstrate basic knowledge of microbiology, perform clinical laboratory "WAIVED TESTS".
21.0 Demonstrate basic knowledge of urinalysis, perform clinical laboratory "WAIVED TESTS".
22.0 Demonstrate basic knowledge of clinical chemistry, perform clinical laboratory "WAIVED TESTS".
23.0 Demonstrate basic knowledge of hematology, perform clinical laboratory "WAIVED TESTS".
23.0 Based on basic knowledge of hematology, perform clinical laboratory "WAIVED TESTS".
24.0 Successfully complete learning experiences in the clinical setting.

MEDICAL LABORATORY TECHNOLOGY (CERTIFICATE) 25-36

25.0 Discuss anatomy and physiology of the human body as it relates to the field of Medical Laboratory Technology.
26.0 Discuss the general responsibilities and functions encountered by a Medical Technician.
27.0 Apply quality assurance principles and safety protocols.
28.0 Demonstrate knowledge of urinalysis principles and procedures.
29.0 Demonstrate knowledge of hematological principles and procedures.
30.0 Demonstrate knowledge of hemostasis and related diagnostic principles and procedures.
31.0 Demonstrate knowledge of microbiological principles and procedures.
32.0 Demonstrate knowledge of clinical chemistry principles and procedures.
33.0 Demonstrate knowledge of immunohematological principles and procedures.
34.0 Demonstrate knowledge of immunological/serological principles and procedures.
35.0 Demonstrate knowledge of principles and procedures of body fluid analysis.
36.0 Demonstrate knowledge of the operation of computer systems.

MEDICAL LABORATORY TECHNOLOGY (ASSOCIATE DEGREE; (37-42)

37.0 Demonstrate knowledge of selected laboratory operations.
38.0 Demonstrate knowledge of advanced hematological principles and procedures.
39.0 Demonstrate knowledge of advanced hemostasis testing.

40.0 Demonstrate knowledge of advanced microbiological principles and procedures.
41.0 Demonstrate knowledge of advanced clinical chemistry principles and procedures.
42.0 Demonstrate knowledge of advanced immunological procedures.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Medical Laboratory Technology (Associate Degree)
Secondary Number:
Postsecondary Number: 0317.030900

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

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11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PHLEBOTOMY (12-19)

12.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:

12.05 Follow approved procedure for labeling of specimens.
12.01 Demonstrate the appropriate professional behavior of a phlebotomist.
12.03 Explain to the patient the procedure to be used in specimen collection.
12.08 Explain in detail the importance of identifying patients correctly when drawing blood.

13.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

13.01 List, classify and discuss various departments and services within the health care setting with which the phlebotomist must interact to obtain laboratory specimens from patients.
13.02 Identify the major departments/sections within the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
13.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

14.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

14.01 Describe and define major body systems with emphasis on the circulatory system.
14.02 List and describe the main superficial veins used in performing venipuncture.
14.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).
14.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

15.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

15.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
15.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.
15.03 Identify and discuss proper use of supplies used in collecting microspecimens.
15.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
15.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.
15.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.
15.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

16.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY--The student will be able to:

16.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.
16.02 Discuss/perform methods for facilitating capillary/venipuncture collection.
16.03 Demonstrate knowledge of established protocol for patient and specimen identification.
16.04 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.
16.05 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.
16.06 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and patient care.
16.07 Describe the correct order of draw during capillary and venipuncture.
16.08 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.
16.09 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.
16.10 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.
16.11 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation.

17.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS--The student will be able to:

17.01 Define the term "nosocomial infection."
17.02 Describe/practice procedures for infection prevention.
17.03 Discuss/perform isolation procedures.

17.04 Identify potential routes of infection.

18.0 PRACTICE ACCEPTED PROCEDURES OF TRANSPORTING, ACCESSIONING AND PROCESSING SPECIMENS--The student will be able to:

18.01 Describe routine procedures for transporting and processing specimens.
18.02 Describe the significance of time constraints for specimen collection and delivery.
18.03 Demonstrate knowledge of accessioning procedures.
18.04 Prepare aliquot(s) of specimen or component(s) for analysis according to specimen type and analysis to be performed.
18.05 Follow protocol for accepting verbal test orders.

19.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:

19.01 Distinguish and perform procedures which ensure reliability of test results when collecting blood specimens.
19.02 Demonstrate knowledge of and practice appropriate patient safety.
19.03 Practice laboratory safety in accordance with established procedures.
19.04 Follow documentation procedures for work related accidents.

MEDICAL LABORATORY ASSISTING (20-24)

20.0 DEMONSTRATE BASIC KNOWLEDGE OF MICROBIOLOGY, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

20.01 Perform techniques of microbiology related to disinfection techniques.
20.02 Discuss techniques of microbiology related to isolation techniques.
20.03 Perform techniques of microbiology related to sterilization techniques.
20.04 Perform techniques of microbiology related to preparation, staining.
20.05 Understand the microscopic examination of gram stains.
20.06 Discuss techniques of microbiology related to inoculation and transfer of cultures.
20.07 Perform basic techniques of microbiology
20.08 Perform techniques of microbiology related to preparation of artificial culture media.
20.09 Discuss techniques of microbiology related to principles and use of the microscope.

21.0 DEMONSTRATE BASIC KNOWLEDGE OF URINALYSIS, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

21.01 Discuss urinalysis techniques related to normal and abnormal components of the urine.
21.02 Perform urinalysis techniques related to collection and preservation of specimens.

21.03 Discuss urinalysis techniques related to physical properties of urine and related odors, color.

21.04 Perform urinalysis techniques related to dipstick urine pH and describe clinical significance.

21.05 Discuss urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometer and refractometer.

21.06 Perform dipstick or tablet (nonautomated) urinalysis techniques related to performance of chemical tests.

21.07 Discuss urinalysis techniques related to microscopic identification of significant elements.

21.08 Perform urinalysis techniques related to principles and use of centrifuge.

22.0 DEMONSTRATE BASIC KNOWLEDGE OF CLINICAL CHEMISTRY, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

22.01 Perform techniques of clinical chemistry related to metric measurement.

22.02 Perform techniques of clinical chemistry related to laboratory glassware and equipment.

22.03 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.

22.04 Discuss techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.

22.05 Discuss techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.

22.06 Discuss techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.

22.07 Discuss basic techniques of clinical chemistry related to normal and abnormal physiology.

23.0 DEMONSTRATE BASIC KNOWLEDGE OF HEMATOLOGY, PERFORM CLINICAL LABORATORY "WAIVED TESTS"--The student will be able to:

23.01 Discuss techniques of hematology related to counting formed elements of blood.

23.02 Perform techniques of hematology related to preparation and staining.

23.03 Discuss techniques of cell differential microscopic examination of blood films.

23.04 Perform techniques of hematology related to spun hematocrit tests.

23.05 Discuss techniques of hematology related to bleeding and clotting times.

23.06 Perform techniques of hematology related to hemoglobin tests.

23.07 Discuss techniques of hematology related to calculation of red blood cell indices.

23.08 Discuss basic techniques of hematology related to normal and abnormal physiology.

24.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING--The student will be able to:

24.01 Observe skills outlined in outcomes 1-11.
24.02 Complete clinical rotations, performing the following waived tests: dipstick or tablet urinalysis (nonautomated); fecal occult blood; ovulation tests; urine pregnancy tests; sedimentation rate (nonautomated); hemoglobin by copper sulfate method and by single analyte instrument (Hemocue); blood glucose performed on an FDA approved device; and spun hematocrit.

MEDICAL LABORATORY TECHNOLOGY (CERTIFICATE): (25-36)

25.0 DISCUSS ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY AS IT RELATES TO THE FIELD OF MEDICAL LABORATORY TECHNOLOGY--The student will be able to:

25.01 Identify the major body systems and their anatomical features.
25.02 Explain the physiological processes in the human system necessary to influence and maintain homeostasis.

26.0 DISCUSS THE GENERAL RESPONSIBILITIES AND FUNCTIONS ENCOUNTERED BY A MEDICAL TECHNICIAN--The students will be able to:

26.01 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solutions of such questions.
26.02 Organize and communicate the results obtained by observation and experimentation.
26.03 Demonstrate ability to evaluate and draw conclusions.
26.04 Demonstrate knowledge of anatomy and physiology of body systems.
26.05 Demonstrate ability to report observations in written or oral form.
26.06 Discuss the licensure and certification requirements of the major classifications of clinical laboratory personnel.

27.0 APPLY QUALITY ASSURANCE PRINCIPLES AND SAFETY PROTOCOLS--The student will be able to:

27.01 Recognize specimen suitability and determine need for rejection/recollection using factors described in clinical protocol.
27.02 Describe special procedures for transporting and processing specimens.
27.03 Describe clinical laboratory role in providing quality assurance in laboratory testing, reporting, and use and maintenance of equipment.
27.04 Demonstrate all required calibration procedures.
27.05 Demonstrate and record all quality control procedures required for the tests assayed and recognize unacceptable results.
27.06 Identify and report problems encountered in daily quality control according to standard operating procedures.
27.07 Adhere to current OSHA regulations regarding laboratory hazards.

28.0 DEMONSTRATE KNOWLEDGE OF URINALYSIS PRINCIPLES AND PROCEDURES--The student will be able to:

28.01 Discuss the renal system as it relates to urinalysis.
28.02 Describe renal function tests.
28.03 Describe principles of and perform routine physical and clinical analyses on urine.
28.04 Prepare, identify and quantitate urine microscopies.
28.05 Correlate abnormal physical, chemical and microscopic urine results with associated pathological conditions.
28.06 Describe collection procedures for random and timed urine specimens.

29.0 DEMONSTRATE KNOWLEDGE OF HEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

29.01 Discuss the organs, cells and cellular interaction of the lymphoid and reticuloendothelial systems.
29.02 Discuss the principles of and perform routine hematology procedures.
29.03 Differentiate normal from abnormal blood cell morphology and relate the abnormal findings to the commonly referenced hematological disorders.
29.04 Identify normal and abnormal molecular structure of hemoglobin and the more common hemoglobinopathies.

30.0 DEMONSTRATE KNOWLEDGE OF HEMOSTASIS AND RELATED DIAGNOSTIC PRINCIPLES AND PROCEDURES--The student will be able to:

30.01 Discuss and define the interactive systems necessary to maintain hemostasis.
30.02 Describe the principles of and perform routine testing used in the evaluation of the vascular, platelet, coagulation factor and fibrinolytic systems.
30.03 Discuss conditions and commonly referenced diseases related to abnormal hemostasis.

31.0 DEMONSTRATE KNOWLEDGE OF MICROBIOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

31.01 Discuss microbial taxonomy and classification.
31.02 Discuss bacterial metabolism, reproduction, cell structures and their functions.
31.03 Discuss and perform disinfection and sterilization techniques.
31.04 Discuss classification, composition and preparation of culture media.
31.05 Discuss specimen collection, handling, and culturing techniques for urine, stool, wound, throat, body fluids, blood and exudates.
31.06 Demonstrate bacteriologic culture techniques necessary for isolation and identification of organisms.
31.07 Demonstrate and interpret antibiotic susceptibility tests.
31.08 Discuss diseases associated with selected anaerobic and aerobic bacteria.

31.09 Identify commonly encountered aerobic bacteria through morphological, physical and biochemical properties.

31.10 Discuss the principles of, prepare, and interpret Gram stains.

31.11 Discuss collection and handling of specimens for fungal, mycobacterial and viral specimens.

31.12 Prepare and examine specimens, and identify ova and parasites as indicated.

32.0 DEMONSTRATE KNOWLEDGE OF CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES--The student will be able to:

32.01 Discuss the renal system and related chemistry tests.

32.02 Discuss principles of and perform common renal function tests.

32.03 Discuss carbohydrate, protein and lipid metabolism.

32.04 Discuss principles of and perform commonly ordered tests related to carbohydrate, protein and lipid metabolism.

32.05 Discuss the liver and its functions as related to chemistry tests.

32.06 Discuss principles of and perform commonly ordered liver function tests.

32.07 Discuss enzyme classification, origin, activity and function.

32.08 Discuss principles of and perform commonly ordered enzyme procedures.

32.09 Discuss electrolyte balance as related to health and disease.

32.10 Discuss principles of and perform electrolyte analyses.

32.11 Discuss the physiology of the endocrine system and the principal tests used to determine endocrine function.

32.12 Discuss the role of the laboratory in therapeutic drug monitoring and toxicology.

32.13 Discuss and perform general electrophoresis techniques.

32.14 Demonstrate knowledge of principles of instrumentation as related to the clinical chemistry laboratory.

33.0 DEMONSTRATE KNOWLEDGE OF IMMUNOHEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

33.01 Discuss basic genetics of the antigen system.

33.02 Discuss the ABO, Rh and other blood group systems.

33.03 Perform antigen and antibody testing to establish ABO group and Rh.

33.04 Discuss and perform routine compatibility testing.

33.05 Discuss and perform antibody screening and identification of common single antibodies.

33.06 Discuss donor interview, criteria for selection, phlebotomy preparation, and donor blood processing.

33.07 Identify symptoms of and required laboratory protocol for handling suspected transfusion reactions.

33.08 Discuss immune hemolytic diseases commonly investigated through immunohematological procedures.

33.09 Discuss multiple antibody identification procedures.

33.10 Discuss appropriate absorption and elution techniques.

33.11 Discuss component collection and preparation.

34.0 DEMONSTRATE KNOWLEDGE OF IMMUNOLOGICAL/SEROLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

34.01 Discuss the immune system and the normal immune response.
34.02 Discuss physical and chemical properties of immunoglobulins and complement and their reactions in vitro.
34.03 Discuss the principle of and perform the basic agglutination, flocculation and precipitation procedures in serology.
34.04 Discuss principles of complement fixation, immunoelectrophoresis and enzyme immunoassay.
34.05 Discuss the clinical significance of the commonly performed serological tests.

35.0 DEMONSTRATE KNOWLEDGE OF PRINCIPLES AND PROCEDURES OF BODY FLUID ANALYSIS--The student will be able to:

35.01 Define and discuss the differences between transudate and exudates.
35.02 Discuss miscellaneous body fluids to include cerebral spinal, seminal and joint fluids.
35.03 Demonstrate physical, chemical and microscopic evaluations of common body fluids.

36.0 DEMONSTRATE KNOWLEDGE OF THE OPERATION OF COMPUTER SYSTEMS--The student will be able to:

36.01 Discuss the role of computer systems in laboratory data management.
36.02 Demonstrate knowledge of common computer terminology.
36.03 Demonstrate entry level computer operations for specimen accessioning, data reporting, and quality control recording.
36.04 Demonstrate entry level operational skills in the use of computer-interfaced analytical instrumentation.

MEDICAL LABORATORY TECHNOLOGY (ASSOCIATE DEGREE) - The following intended outcomes (37-42), in addition to the outcomes for the program of Medical Laboratory Technology (Certificate), complete the occcupational completion point for the Medical Laboratoy Technology (Associate Degree) program.

37.0 DEMONSTRATE KNOWLEDGE OF SELECTED LABORATORY OPERATIONS--The student will be able to:

37.01 Apply principles of quality assurance to correct problems encountered in monitoring daily quality control.
37.02 Evaluate laboratory findings and take necessary action to confirm or clarify results according to standard operation and procedure.
37.03 Demonstrate knowledge of operation and principles of laboratory instruments.

38.0 DEMONSTRATE KNOWLEDGE OF ADVANCED HEMATOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

38.01 Identify normal and abnormal, immature and mature erythrocytes at each stage of maturation.
38.02 Identify and distinguish between normal, atypical and leukemic leukocytes at each stage of maturation.
38.03 Perform selected cytochemical staining procedures.
38.04 Discuss the principle of and perform hemoglobin electrophoresis with pattern interpretation.

39.0 DEMONSTRATE KNOWLEDGE OF ADVANCED HEMOSTASIS TESTING--The student will be able to:

39.01 Discuss the principle of substitution testing for factor deficiencies.
39.02 Discuss the principle of specific factor assays.
39.03 Correlate the laboratory test results for fibrinolysis with conditions affecting the fibrinolytic system.
39.04 Discuss specialized platelet function tests.
39.05 Correlate laboratory results with possible inherited and/or acquired coagulation abnormalities.

40.0 DEMONSTRATE KNOWLEDGE OF ADVANCED MICROBIOLOGICAL PRINCIPLES AND PROCEDURES--The student will be able to:

40.01 Discuss procedures for and clinical significance of anaerobe identification.
40.02 Classify fungi and state their clinical significance.
40.03 Perform general techniques used in identifying fungi.
40.04 Identify selected fungi.
40.05 Discuss and perform automated microbiological procedures.
40.06 Identify life cycles, modes of transmission, prevention and pathophysiology of clinically significant parasites.
40.07 Discuss microbial and immunological techniques to identify selected clinically significant viruses.
40.08 Discuss classification and related disease states of clinically significant viruses.
40.09 Identify commonly used antibiotics, their usage and mechanisms of activity.

41.0 DEMONSTRATE KNOWLEDGE OF ADVANCED CLINICAL CHEMISTRY PRINCIPLES AND PROCEDURES--The student will be able to:

41.01 Perform, calculate, analyze and recognize normal/abnormal electrophoresis procedures.
41.02 Perform and calculate results of immunoassay procedures.
41.03 Perform, calculate, and recognize associated disease states for selected isoenzyme assays.
41.04 Perform, calculate, and recognize associated disease states for blood lipid profiles.
41.05 Perform and calculate selected procedures related to endocrine function.
41.06 Perform selected assays for therapeutic and toxic substances.
41.07 Discuss the principles and procedures of blood gas analysis, including arterial specimen collection and clinical significance.

42.0 DEMONSTRATE KNOWLEDGE OF ADVANCED IMMUNOLOGICAL PROCEDURES--The student will be able to:

42.01 Discuss selected specialty serological tests such as immunofluorescence assays.
42.02 Discuss and interpret antinuclear antibody patterns and their relationship to disease states.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Histologic Technology

PSV

CIP Number	0317.030800
Grade Level	College
Length	Associate Degree/76 credit hours

MAJOR CONCEPTS/CONTENT: The purpose of this program is to prepare students for employment as tissue technologists (078.361-030) or histotechnicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, preparation of tissue specimens of human and animal origin for research, teaching purposes, or diagnosis of body dysfunction and malignancy. A clinical component is a necessary element of this program.

The standard credit hour length for this program is 76 credit hours according to Rule 6A-14.030.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.
12.0 Identify the anatomic structure and function of body systems in relation to disease states and services performed by the histotechnician.
13.0 Practice quality assurance, safety, and acceptable communication skills.
14.0 Adhere to legal and ethical principles related to the practice of histotechnology.

15.0 Receive tissue specimens and perform preparation techniques as indicated.
16.0 Assist with frozen section procedures.
17.0 Maintain equipment.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Histologic Technology
Secondary Number:
Postsecondary Number: 0317.030800

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS for Healthcare Providers or higher.

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06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.

11.03 Make and use measurements in both traditional and metric units.

11.04 Make estimates and approximations and judge the reasonableness of the result.

11.05 Convert from regular to 24 hour time.

11.06 Demonstrate ability to evaluate and draw conclusions.

11.07 Organize and communicate the results obtained by observation and experimentation.

11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

11.09 Calculate ratios.

HISTOLOGIC TECHNOLOGY: The following intended outcomes (12-17), complete the occupational completion point for the Histologic Technology program.

12.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DISEASE STATES AND SERVICES PERFORMED BY THE HISTOTECHNICIAN--The student will be able to:

12.01 Demonstrate knowledge of human anatomy and physiology as related to histotechnology.
12.02 Demonstrate knowledge of normal histology of human organs.
12.03 Demonstrate knowledge of various methods of obtaining histological specimens from patients.
12.04 Identify tissue structures and cellular components; relate both to physiological functions.
12.05 Demonstrate knowledge of types of histological specimens usually submitted for gross and microscopic examination.
12.06 Demonstrate knowledge of the processing of histologic specimens especially as related to disease processes.
12.07 Demonstrate knowledge of tissue processing methods, including variety of fixatives used and how each relates to a specific entity or disease process to be diagnosed.

13.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:

13.01 Practice quality control in the histology laboratory as required by the accrediting agency.
13.02 Follow institutional policies and procedures related to safety.
13.03 Practice acceptable laboratory safety.
13.04 Demonstrate knowledge of diagnostic terminology.
13.06 Recognize errors and their sources, and take corrective action.
13.07 Demonstrate knowledge of chemical hazards within the histopathology laboratory.
13.08 Demonstrate knowledge of proper disposal methods for all chemical and biological waste within the histopathology laboratory.

14.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF HISTOTECHNOLOGY--The student will be able to:

14.01 Practice discretion and confidentiality in regard to laboratory reports.
14.02 Demonstrate knowledge of the histotechnician's role and responsibilities in relation to the health care team.
14.03 Demonstrate knowledge of the legal ramifications of clinical practice.

15.0 RECEIVE TISSUE SPECIMENS AND PERFORM PREPARATION TECHNIQUES AS INDICATED--The student will be able to:

15.01 Evaluate, accept, identify and label histologic specimens.
15.02 Perform the most advantageous preparation and staining techniques.
15.03 Solve problems in staining and preparation procedures.
15.04 Evaluate and implement new preparation and staining procedures.
15.05 Distinguish between well-prepared and stained and poorly-prepared and stained histologic specimens.
15.06 Identify tissue structures and their staining characteristics.

16.0 ASSIST WITH FROZEN SECTION PROCEDURES--The student will be able to:

16.01 Demonstrate cryostat cutting.
16.02 Demonstrate rapid hematoxylin and eosin staining.
16.03 Process consultation report, slides and tissue.

17.0 MAINTAIN EQUIPMENT--The student will be able to:

17.01 Perform preventive and corrective maintenance of equipment and instruments within specified limits.
17.02 Refer to appropriate person(s) for complex repairs.
17.03 Demonstrate knowledge of laboratory management.

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Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Coder Specialist
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170526**
CIP Number	0317.050602
Grade Level	30, 31
Length	900 hours
Certification	CER COD SP G MED RECTEC @7 G MED ASST @7 G MED TRANS @7 G
Basic Skills	
Math 1	8
Language	10
Reading	10

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as coder, medical record coder, coding technician, coding clerk, coder specialist, (Industry Title) or to provide supplemental training for persons previously or currently employed in this occupation. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

The content includes, but is not limited to, medical terminology, anatomy and physiology, coding systems, fundamentals of disease process including pharmacology, health care delivery systems, basics of medical records services, ethical and legal responsibilities, safety/security procedures, basic data processing, and employability skills.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory facilities and equipment should be provided. Laboratory activities should be correlated with classroom activities and reinforced in the clinical area. Supervised clinical practice is an integral part of the program.

III. **SPECIAL NOTES:** Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Students should be encouraged to become members of the local and national professional organization and participate in the activities. Completers of this program should be prepared to take the coding specialist certification examination given by the American Medical Record Association.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 10.0 and Reading 10.0. This grade level number corresponds to grade equivalent score obtained on a state designated basic skills examination.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The typical length of this program for the average achieving student is 900 clock hours which includes 90 clock hours for the Health Careers Core.

IV. **INTENDED OUTCOMES:**

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.

02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.

03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

CODER SPECIALIST - Industry Title (12-19)

12.0 Describe the anatomy and physiology of the human body.
13.0 Demonstrate proficiency in the application of medical terminology.
14.0 Demonstrate an understanding of the fundamentals of disease process in relationship to the human body, including pharmacology.
15.0 Demonstrate proficiency in use of coding systems, both manual and automated.
16.0 Discuss the health care delivery system.
17.0 Explain the basics of medical record services.
18.0 Demonstrate ethical and legal principles with regard to the use of medical records.
19.0 Demonstrate computer skills.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Coder Specialist
Secondary Number:
Postsecondary Number: H170526

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

CODER SPECIALIST: Students completing intended outcomes 12-19 in this module meet the requirements for the occupational completion point of Coder Specialist.

12.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY--The student will be able to:

12.01 Describe the structure and function of the respiratory system.
12.02 Describe the structure and function of the cardio-vascular system.
12.03 Describe the structure and function of the muscular-skeletal system.
12.04 Describe the structure and function of nervous, skin, and sensory systems.
12.05 Describe the structure and function of the reproductive system.
12.06 Describe the structure and function of the urinary system.
12.07 Describe the structure and function of the digestive system.
12.08 Describe the structure and function of the endocrine system.

13.0 DEMONSTRATE PROFICIENCY IN THE APPLICATION OF MEDICAL TERMINOLOGY--The student will be able to:

13.01 Recognize and identify word parts of medical terminology in daily use.
13.02 Build, spell and pronounce correctly, appropriate terms from word parts learned and be able to give the meaning of the word.
13.03 Identify word parts and be able to build, spell and understand new words with those parts.
13.04 Spell and use medical abbreviations.
13.05 Recognize and identify terminology of hospital and other clinical forms.
13.06 Demonstrate use of basic terminology common to medical/surgical practices.

14.0 DEMONSTRATE AN UNDERSTANDING OF THE FUNDAMENTALS OF DISEASE PROCESS IN RELATIONSHIP TO THE HUMAN BODY, INCLUDING PHARMACOLOGY--The student will be able to:

14.01 Demonstrate an understanding of the predisposing factors and direct causes of disease as they relate to the human body.

14.02 Demonstrate an understanding of the general morphology of organisms and their role in the disease process.
14.03 Demonstrate an understanding of the pathogenesis of diseases of the digestive system.
14.04 Identify the structures and function of the accessory organs of digestion and the diseases which may occur.
14.05 Identify the major diseases of the urinary system and the male reproductive system.
14.06 Demonstrate an understanding of the pathogenesis of diseases of the reproductive system.
14.07 Identify the disorders/diseases of the endocrine system.
14.08 Demonstrate an understanding of the diseases of the nervous system.
14.09 Demonstrate an understanding of the pathogenesis of diseases of the muscular-skeletal system.
14.10 Identify the diseases related to the cardio-vascular system.
14.11 Demonstrate an understanding of the pathogenesis of diseases of the respiratory system.

15.0 DEMONSTRATE PROFICIENCY IN USE OF CODING SYSTEMS, BOTH MANUAL AND AUTOMATED--The student will be able to:

15.01 Outline the development of nomenclatures and classification systems.
15.02 Identify conventions and characteristics used in coding.
15.03 Analyze and code diagnoses, procedures, and symptoms.
15.04 Demonstrate ability to code, classify, and index.
15.05 Explain the relationship of Diagnosis Related Groups and the Prospective Payment System to coding.
15.06 Identify the various external regulating agencies and their impact on the coding systems.
15.07 Use procedures for ensuring data quality.

16.0 DISCUSS THE HEALTH CARE DELIVERY SYSTEM--The student will be able to:

16.01 Give the definition of health, as stated by the World Health Organization.
16.02 Explain the development of hospitals from ancient times to the present.
16.03 Explain the effect on family and community life with the change from rural to urban society.
16.04 List factors which influence health of the individual, nation, and world.
16.05 List the responsibilities of national, state and local health agencies to citizens.
16.06 Describe different types of health care facilities, i.e., clinics, community health care facilities, etc.
16.07 Explain purpose and classification of hospitals.

17.0 EXPLAIN THE BASICS OF MEDICAL RECORD SERVICES--The student will be able to:

17.01 Describe origin, history and definition of medical records.

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17.02 Describe the functions of the medical record department, i.e., data collecting, filing, retrieving, coding, indexing, etc.
17.03 Explain the classification and functions of medical record personnel and chain of command.
17.04 State reasons medical records are important in the health care delivery system.
17.05 Explain different filing systems used in health care institutions.
17.06 Describe the development of the medical record.
17.07 Explain the importance of the medical record in relation to state and federal agencies, accrediting and licensing agencies.
17.08 Recognize the different filing and coding classification systems.

18.0 DEMONSTRATE ETHICAL AND LEGAL PRINCIPLES WITH REGARD TO THE USE OF MEDICAL RECORDS--The student will be able to:

18.01 Explain the importance of maintaining ethical and legal standards in compiling and using medical records.
18.02 Discuss the Code of Ethics of the American Medical Association.

19.0 DEMONSTRATE COMPUTER SKILLS--The student will be able to:

19.01 Operate a word processor and coding equipment.
19.02 Demonstrate keyboarding skills.

03170100CL **July 1997**

Florida Department of Education
CLUSTER CURRICULUM FRAMEWORK

Cluster Title: Dental
Cluster Type: Job Preparatory
Occupational Area: Health Science Education
Components : Core, Two Programs, And Two Occupational Completion Points

	PSAV	PSV
Grade Level:	30,31	College
Facility Code:	252	
VSO:	HOSA	HOSA
Coop Method:	No	No
Apprenticeship:	No	No

I. PURPOSE: The purpose of the programs in this cluster is to prepare students for employment or advanced training in dental hygiene or dental assisting. The programs in the cluster also provide supplemental training for persons previously or currently employed in these professions.

Dental assisting content includes, but is not limited to, dental office and patient management, basic dental laboratory procedures, dental and general anatomy, dental terminology, nutrition, dental instrument and equipment utilization, microbiology, dental pharmacology and anesthesia, chairside assisting and expanded functions, dental office emergencies/CPR, dental radiography, maintenance and asepsis of dental operatory and instrumentation, dental specialty procedures, employability skills, leadership and human relations skills, ethics and jurisprudence, dental materials and preventive dentistry.

Dental hygiene content includes, but is not limited to, patient assessment, dental hygiene instrumentation and direct patient care services (scaling/root planing/curettage/radiographs/oral hygiene-instruction/expanded functions). Content also includes course work in dental and general anatomy and physiology, English, speech, psychology, sociology, microbiology, nutrition, general and oral histology, general and oral pathology, periodontics, pharmacology/anesthesia, community dental health, dental office emergencies, infection control, special population dental care, office management, chairside assisting, employability skills, ethics and jurisprudence.

This cluster of programs focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **CLUSTER STRUCTURE:** This cluster is a planned sequence of instruction consisting of a core, two programs and two occupational completion points. When the recommended sequence is followed, the structure will

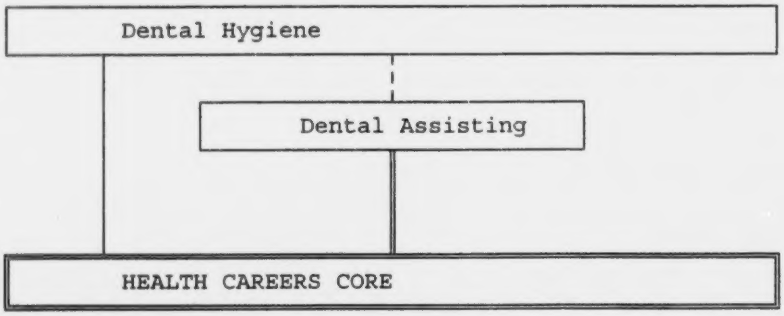
allow students to complete specified portions of the program for employment or remain for advanced training.
This cluster meets the goals of TECH PREP and is based on the model developed by the Allied Health Articulation Task Force.

Students must complete the core, or demonstrate the mastery of skills standards contained in the core, before advancing in either of the programs:

DENTAL ASSISTING

DENTAL HYGIENE

The following diagram illustrates the cluster structure.



III. **LABORATORY ACTIVITIES:** Clinical/laboratory experiences are integrated with the didactic portion of these programs.

IV. **SPECIAL NOTES:** The programs in this cluster meet the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Health Occupations Students of America, Inc., is the appropriate vocational student organization as well as a career related professional organizations for providing leadership training experiences and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum [6A-6.064(7),F.S.].

This program should meet the accreditation standards for dental hygiene/ dental assisting education programs (c. 1992). For further information, contact: American Dental Association Commission on Dental Accreditation, 211 East Chicago avenue, Chicago, Illinois 60611.

Dental Hygiene Program - Students receive an Associate in Science degree upon successful completion of the program and are eligible to sit for the ADA National Board Dental Hygiene Examination and the Florida Dental Hygiene Licensure Examination.

* Passing the State Board Exam allows one to obtain state licensure. For further information contact the Florida Agency for Health Care Administration (AHCA), Division of Health Quality Assurance, Board of Dentistry, 1940 North Monroe Street, Tallahassee, FL 32399-0765, 904/488-6015.

Dental Assisting Program - The student must show proof of graduation from high school or evidence of the equivalent.

In accordance with Rule 6a-10.040, FAC, the minimum basic skills grade level required for postsecondary adult vocational students to exit the programs in this cluster are listed at the program level or at the occupational completion points within the program. These grade level numbers correspond to a grade equivalent score obtained on one of the state designated basic skills examinations. If a student does meet the basic skills level required for completion from the program, remediation should be provided concurrently in the System for Applied Individualized Learning (SAIL) lab prior to admission in an Adult Basic Education (ABE) setting.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this cluster and is printed in a supplement to this document.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Dental Assisting

PSAV

Program Numbers	**H170101**
CIP Number	0317.010100
Grade Level	30, 31
Length	1200 hours
Certification	DENTAL HYG @5 DENTAL ASST @7 G DENTAL TEC $7 $G
Basic Skills	
Math	10
Language	10
Reading	10

MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as dental assistants (66002442) and dental auxiliaries (dental assistants) or to provide supplemental training for persons previously or currently employed in this occupation and to take the Dental Assisting National Board Examination. The program should meet the requirements of the Commission on Dental Accreditation of the American Dental Association and standards recommended by the Florida Board of Dentistry.

The content includes, but is not limited to, dental office and patient management, basic dental laboratory procedures, dental and general anatomy, dental terminology, nutrition, dental instrument and equipment utilization, microbiology, dental pharmacology and anesthesia, chairside assisting and expanded functions, dental office emergencies/CPR, dental radiography, maintenance and asepsis of dental operatory and instrumentation, dental specialty procedures, employability skills, leadership and human relations skills, ethics and jurisprudice, dental materials and preventive dentistry.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.

06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

DENTAL ASSISTING: (12 - 22)
12.0 Perform chairside assisting for specialty procedures.
13.0 Record patient assessment data.
14.0 Perform general office procedures.
15.0 Identify structures and explain functions and pathologies of dental and general anatomy.
16.0 Identify, describe, maintain and utilize dental instruments and equipment.
17.0 Identify principles of microbiology and disease prevention and perform infection control procedures.
18.0 Identify the functions of pharmacology and anesthesia as they relate to dentistry.
19.0 Identify and perform dental and carpal radiographic procedures.
20.0 Identify properties and uses, and manipulate dental materials.
21.0 Describe principles and perform techniques of preventive dentistry.
22.0 Describe the legal and ethical responsibilities of the dental health care worker.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Dental Assisting
Secondary Number:
Postsecondary Number: H170101

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

Dental Assisting - Students completing the following intended outcomes (12-22) meet the requirements of the Dental Assisting program. (66002442)

12.0 PERFORM CHAIRSIDE ASSISTING FOR SPECIALTY PROCEDURES--The student will be able to:

12.01 Apply principles of four handed dentistry.
12.02 Evacuate and maintain the operating field.
12.03 Perform expanded functions as permitted by the Florida statute/law pertaining to dentistry.
12.04 Assemble instruments and assist in general and specialty dental procedures.
12.05 Prepare tray set-ups for specific specialty procedures.

13.0 RECORD PATIENT ASSESSMENT DATA--The student will be able to:

13.01 Take and record medical-dental histories.
13.02 Perform a visual assessment of existing oral conditions.
13.03 Record conditions diagnosed by the dentist.

14.0 PERFORM GENERAL OFFICE PROCEDURES--The student will be able to:

14.01 Maintain appointment control.
14.02 Maintain an active recall system.
14.03 Prepare and maintain accurate patient records.
14.04 Prepare and maintain patient financial records, collect fees.
14.05 Prepare and maintain office financial records.
14.06 Prepare and maintain dental office inventory control and purchasing.
14.07 Demonstrate public relations responsibilities of the secretary/receptionist.
14.08 Demonstrate skills on office equipment.
14.09 Maintain office environment.
14.10 Receive and dismiss patients and visitors.
14.11 Describe dental office emergencies and their prevention and treatment.

15.0 IDENTIFY STRUCTURES AND EXPLAIN FUNCTIONS AND PATHOLOGIES OF DENTAL AND GENERAL ANATOMY--The student will be able to:

15.01 Identify structures and functions of head and neck anatomy including bones, muscles, sinuses, salivary glands, nerves and blood vessels.
15.02 Identify embryonic development of head, oral cavity, and teeth.
15.03 Identify teeth and their landmarks.
15.04 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
15.05 Recognize and describe oral pathological conditions.

16.0 IDENTIFY, DESCRIBE, MAINTAIN AND UTILIZE DENTAL INSTRUMENTS AND EQUIPMENT--The student will be able to:

16.01 Identify various types, functions and operations of dental operatory and laboratory equipment.
16.02 Identify types and functions of operative, restorative, surgical, prosthodonic, orthodontic and endodontic dental instruments.
16.03 Maintain dental operatory equipment and instruments.
16.04 Identify types and functions of specific dental hygiene instruments with emphasis on category rather than individual instruments.

17.0 IDENTIFY PRINCIPLES OF MICROBIOLOGY AND DISEASE PREVENTION AND PERFORM INFECTION CONTROL PROCEDURES--The student will be able to:

17.01 Differentiate between pathogenic and non-pathogenic microorganisms.
17.02 Describe pathogens and modes of disease transmission.
17.03 Differentiate between aseptic and non-aseptic environments.
17.04 Perform aseptic handwashing technique.
17.05 Describe and apply methods of cleaning, disinfection and sterilization.

18.0 IDENTIFY THE FUNCTIONS OF PHARMACOLOGY AND ANESTHESIA AS THEY RELATE TO DENTISTRY--The student will be able to:

18.01 Identify drug requirements, agencies, and regulations.
18.02 Record a drug prescription on patient's chart.
18.03 Identify drug actions, side effects, indications and contraindications; verify with Physician's Desk Reference or its equivalent.
18.04 Identify common drugs used in dentistry.
18.05 Prepare and apply topical anesthetic agent.
18.06 Identify properties of anesthetics.
18.07 Prepare syringes for the administration of local anesthetics.
18.08 Monitor and identify precautions in the use of nitrous oxide-oxygen conscious sedation.
18.09 Identify drugs and chemicals used for infection control in the dental office.

19.0 IDENTIFY AND PERFORM DENTAL AND CARPAL RADIOGRAPHIC PROCEDURES--The student will be able to:

19.01 Describe history, physics and biological effects of ionizing radiation.
19.02 Identify parts of the X-ray machine including accessories.
19.03 Demonstrate radiologic health protection techniques.
19.04 Perform dark room/processing procedures, mix solutions.
19.05 Place and expose dental and carpal radiographic films.
19.06 Identify radiographic anatomical landmarks.
19.07 Mount radiographic surveys.
19.08 Maintain unexposed film inventory and storage.

20.0 IDENTIFY PROPERTIES AND USES, AND MANIPULATE DENTAL MATERIALS--The student will be able to:

20.01 Identify properties and uses and manipulate gypsum.
20.02 Identify properties and uses and manipulate restorative materials.
20.03 Identify properties and uses and manipulate dental cements.
20.04 Identify properties and uses and manipulate impression materials.
20.05 Identify properties and uses and manipulate acrylics and/or thermoplastics.
20.06 Identify properties and uses and manipulate waxes.
20.07 Perform dental laboratory procedures to include the fabrication of casts, custom trays and/or temporary crowns and bridges.
20.08 Clean and polish removable dental appliances.

21.0 DESCRIBE PRINCIPLES AND PERFORM TECHNIQUES OF PREVENTIVE DENTISTRY--The student will be able to:

21.01 Identify and instruct patients on applicable methods of preventive dentistry.
21.02 Prepare set up for oral prophylaxis and apply anticariogenic treatments.
21.03 Identify the elements of nutrition, basic food groups and acceptable diets.
21.04 Identify deficiencies that manifest symptoms in the oral cavity.

22.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER--The student will be able to:

22.01 Define commonly used legal vocabulary relating to dentistry.
22.02 Describe ethical considerations/obligations in the dental team-patient relationship.
22.03 Explain risk management.
22.04 Identify areas of Florida Statute 466 and Rule chapter 21 applicable to practice by the dental health workers.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Dental Hygiene

PSV

CIP Number	0317.010200
Grade Level	College
Length	Associate Degree/88 credit hours

MAJOR CONCEPTS/CONTENT: This program is designed to prepare students for employment as dental hygienists (32908213) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, patient assessment, dental hygiene instrumentation and direct patient care services (scaling/root planing/curettage/radiographs/oral hygiene-instruction/expanded functions). Content also includes course work in dental and general anatomy and physiology, English, speech, psychology, sociology, microbiology, nutrition, general and oral histology, general and oral pathology, periodontics, pharmacology/anesthesia, community dental health, dental office emergencies, infection control, special population dental care, office management, chairside assisting, employability skills, ethics and jurisprudence.

The standard credit hour length for this program is 88 credit hours according to Rule 6A-14.030.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

DENTAL ASSISTING (12-22)

12.0 Perform chairside assisting for specialty procedures.
13.0 Record patient assessment data.
14.0 Perform general office procedures.
15.0 Identify structures and explain functions and pathologies of dental and general anatomy.
16.0 Identify, describe, maintain and utilize dental instruments and equipment.
17.0 Identify principles of microbiology and disease prevention and perform infection control procedures.
18.0 Identify the functions of pharmacology and anesthesia as they relate to dentistry.
19.0 Identify and perform dental and carpal radiographic procedures.
20.0 Identify properties and uses, and manipulate dental materials.
21.0 Describe principles and perform techniques of preventive dentistry.
22.0 Describe the legal and ethical responsibilities of the dental health care worker.

DENTAL HYGIENIST (23-29)

23.0 Identify and explain functions of dental anatomical landmarks and describe pathological conditions of the teeth, soft tissues and supporting structures of the oral cavity.
24.0 Identify and explain principles of microbiology, disease transmission, disease prevention and perform principles of infection control procedures relating to dental care.
25.0 Identify and explain usage, administration, indications, contraindications, adverse reactions and precautions of pharmaceutical and anesthetic agents used in the treatment of dental disease and of those agents which may influence patient care while receiving dental treatment.
26.0 Describe principles and perform techniques of preventive dentistry.
27.0 Perform patient preassessment.
28.0 Perform direct patient services.
29.0 Implement and evaluate community health interventions and research activities.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Dental Hygiene
Secondary Number:
Postsecondary Number: 0317.010200

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis..
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios

DENTAL ASSISTING - Students completing the following intended outcomes (12-22) meet the requirements of the Dental Assisting program. (66002442)

12.0 PERFORM CHAIRSIDE ASSISTING FOR SPECIALTY PROCEDURES--The student will be able to:

12.01 Apply principles of four handed dentistry.
12.02 Evacuate and maintain the operating field.
12.03 Perform expanded functions as permitted by the Florida statute/law pertaining to dentistry.
12.04 Assemble instruments and assist in general and specialty dental procedures.
12.05 Prepare tray set-ups for specific specialty procedures.

13.0 RECORD PATIENT ASSESSMENT DATA--The student will be able to:

13.01 Take and record medical-dental histories.
13.02 Perform a visual assessment of existing oral conditions.
13.03 Record conditions diagnosed by the dentist.

14.0 PERFORM GENERAL OFFICE PROCEDURES--The student will be able to:

14.01 Maintain appointment control.
14.02 Maintain an active recall system.
14.03 Prepare and maintain accurate patient records.
14.04 Prepare and maintain patient financial records, collect fees.
14.05 Prepare and maintain office financial records.
14.06 Prepare and maintain dental office inventory control and purchasing.
14.07 Demonstrate public relations responsibilities of the secretary/receptionist.
14.08 Demonstrate skills on office equipment.
14.09 Maintain office environment.
14.10 Receive and dismiss patients and visitors.
14.11 Describe dental office emergencies and their prevention and treatment.

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15.0 IDENTIFY STRUCTURES AND EXPLAIN FUNCTIONS AND PATHOLOGIES OF DENTAL AND GENERAL ANATOMY--The student will be able to:

15.01 Identify structures and functions of head and neck anatomy including bones, muscles, sinuses, salivary glands, nerves and blood vessels.
15.02 Identify embryonic development of head, oral cavity, and teeth.
15.03 Identify teeth and their landmarks.
15.04 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
15.05 Recognize and describe oral pathological conditions.

16.0 IDENTIFY, DESCRIBE, MAINTAIN AND UTILIZE DENTAL INSTRUMENTS AND EQUIPMENT--The student will be able to:

16.01 Identify various types, functions and operations of dental operatory and laboratory equipment.
16.02 Identify types and functions of operative, restorative, surgical, prosthodonic, orthodontic and endodontic dental instruments.
16.03 Maintain dental operatory equipment and instruments.
16.04 Identify types and functions of specific dental hygiene instruments with emphasis on category rather than individual instruments.

17.0 IDENTIFY PRINCIPLES OF MICROBIOLOGY AND DISEASE PREVENTION AND PERFORM INFECTION CONTROL PROCEDURES--The student will be able to:

17.01 Differentiate between pathogenic and non-pathogenic microorganisms.
17.02 Describe pathogens and modes of disease transmission.
17.03 Differentiate between aseptic and non-aseptic environments.
17.04 Perform aseptic handwashing technique.
17.05 Describe and apply methods of cleaning, disinfection and sterilization.

18.0 IDENTIFY THE FUNCTIONS OF PHARMACOLOGY AND ANESTHESIA AS THEY RELATE TO DENTISTRY--The student will be able to:

18.01 Identify drug requirements, agencies, and regulations.
18.02 Record a drug prescription on patient's chart.
18.03 Identify drug actions, side effects, indications and contraindications; verify with Physician's Desk Reference or its equivalent.
18.04 Identify common drugs used in dentistry.
18.05 Prepare and apply topical anesthetic agent.
18.06 Identify properties of anesthetics.
18.07 Prepare syringes for the administration of local anesthetics.
18.08 Monitor and identify precautions in the use of nitrous oxide-oxygen conscious sedation.

18.09 Identify drugs and chemicals used for infection control in the dental office.

19.0 IDENTIFY AND PERFORM DENTAL AND CARPAL RADIOGRAPHIC PROCEDURES--The student will be able to:

19.01 Describe history, physics and biological effects of ionizing radiation.
19.02 Identify parts of the X-ray machine including accessories.
19.03 Demonstrate radiologic health protection techniques.
19.04 Perform dark room/processing procedures, mix solutions.
19.05 Place and expose dental and carpal radiographic films.
19.06 Identify radiographic anatomical landmarks.
19.07 Mount radiographic surveys.
19.08 Maintain unexposed film inventory and storage.

20.0 IDENTIFY PROPERTIES AND USES, AND MANIPULATE DENTAL MATERIALS--The student will be able to:

20.01 Identify properties and uses and manipulate gypsum.
20.02 Identify properties and uses and manipulate restorative materials.
20.03 Identify properties and uses and manipulate dental cements.
20.04 Identify properties and uses and manipulate impression materials.
20.05 Identify properties and uses and manipulate acrylics and/or thermoplastics.
20.06 Identify properties and uses and manipulate waxes.
20.07 Perform dental laboratory procedures to include the fabrication of casts, custom trays and/or temporary crowns and bridges.
20.08 Clean and polish removable dental appliances.

21.0 DESCRIBE PRINCIPLES AND PERFORM TECHNIQUES OF PREVENTIVE DENTISTRY--The student will be able to:

21.01 Identify and instruct patients on applicable methods of preventive dentistry.
21.02 Prepare set up for oral prophylaxis and apply anticariogenic treatments.
21.03 Identify the elements of nutrition, basic food groups and acceptable diets.
21.04 Identify deficiencies that manifest symptoms in the oral cavity.

22.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER--The student will be able to:

22.01 Define commonly used legal vocabulary relating to dentistry.
22.02 Describe ethical considerations/obligations in the dental team-patient relationship.

22.03 Explain risk management.
22.04 Identify areas of Florida Statute 466 and Rule chapter 21 applicable to practice by the dental health workers.

DENTAL HYGIENIST--students completing the following intended outcomes (23-29), in addition to the intended outcomes for Dental Assisting, have met the requirements of the Dental Hygiene program and qualify to make application for the state of Florida licensure examination. (32908213)

23.0 IDENTIFY AND EXPLAIN FUNCTIONS OF DENTAL ANATOMICAL LANDMARKS AND DESCRIBE PATHOLOGICAL CONDITIONS OF THE TEETH, SOFT TISSUES AND SUPPORTING STRUCTURES OF THE ORAL CAVITY--The student will be able to:

23.01 Describe and differentiate between normal and malocclusion.
23.02 Identify the elements of the chemical basis of life, cellular metabolism and the structure of the major tissue types of the human body.
23.03 Describe the metabolism of nutrient foods, vitamins and minerals by the human body and pathological conditions related to nutrient deficiencies.
23.04 Identify anatomical structures and physiological function of the principle systems of the human body including the skeletal, muscular, integumentary, circulatory, lymphatic, endocrine, digestive, reproductive, respiratory, urinary, and nervous systems.
23.05 Recognize and describe oral pathological conditions related to the teeth and their supporting structures.
23.06 Identify teeth and their landmarks, and the morphological characteristics of each individual tooth.
23.07 Recognize and describe developmental anomalies related to the teeth, face, and oral structures.

24.0 IDENTIFY AND EXPLAIN PRINCIPLES OF MICROBIOLOGY, DISEASE TRANSMISSION, DISEASE PREVENTION AND PERFORM TO DENTAL CARE--The student will be able to:

24.01 Demonstrate the use of the microscope.
24.02 Collect and prepare slides for examination for pathology.
24.03 Recognize the need for and proper precautions for the prevention of disease transmission during all dental related procedures.
24.04 Identify the role of procaryotic cells, eucaryotic cells, viruses, and bacteria in the infections and mechanisms of diseases.
24.05 Identify the genetics of microbes including replication of DNA and protein synthesis, mutation and gene transfer.

25.0 IDENTIFY AND EXPLAIN USAGE, ADMINISTRATION, INDICATIONS, CONTRAINDICATIONS, ADVERSE REACTIONS AND PRECAUTIONS OF PHARMACEUTICAL AND ANESTHETIC AGENTS USED IN THE TREATMENT OF DENTAL DISEASE AND OF THOSE AGENTS WHICH MAY INFLUENCE PATIENT

CARE WHILE RECEIVING DENTAL TREATMENT--The student will be able to:

25.01 Recognize specific conditions in the oral cavity and modify hygiene treatment plan when indicated.
25.02 Describe methods of administering local anesthetics.
25.03 Identify the tissues innervated by each of the nerves associated with dental local anesthesia.
25.04 Describe properties and mode of action of the ideal local anesthetic.
25.05 List medical considerations in choosing a local anesthetic.
25.06 Describe the process of drug metabolism.

26.0 DESCRIBE PRINCIPLES AND PERFORM TECHNIQUES OF PREVENTIVE DENTISTRY--The student will be able to:

26.01 Perform oral prophylaxis and anticariogenic treatments.
26.02 Identify deficiencies that manifest symptoms in the oral cavity and describe therapies.
26.03 Formulate and present diets to address specific dental needs and provide nutritional counseling.

27.0 PERFORM PATIENT PREASSESSMENT--The student will be able to:

27.01 Take, record, and correlate medical/dental history with dental hygiene treatment plan and services to be performed.
27.02 Use appropriate armamentarium to preassess and chart suspected findings of the oral cavity.
27.03 Take, record, and correlate vital sign observations with dental hygiene treatment plan and services to be performed.
27.04 Perform, record and correlate extraoral and intraoral examination findings with dental hygiene treatment plan and patient services to be performed.
27.05 Conduct complete periodontal examination including probing, radiographic interpretation, mobility assessment and tissue description.
27.06 Consult with dentist and physicians to verify dental and medical information and develop the treatment plan to be implemented.
27.07 Observe and record existing restorations, conditions, and pathologies.
27.08 Interpret and correlate dental radiographs and dental charting with dental hygiene treatment plan.
27.09 Assess the patients nutritional status and prepare recommendations.
27.10 Perform soft tissue reassessment and evaluate the effects of initial dental hygiene therapy and make appropriate referrals.
27.11 Recognize systemic diseases from oral manifestations.
27.12 Record diagnosis made by dentist.

27.13 Recognize and react appropriately to contraindications to dental treatment found in medical and dental history.

28.0 PERFORM DIRECT PATIENT SERVICES--The student will be able to:

28.01 Detect calculus for removal and differentiate between deposits and other causes of tooth surface roughness.
28.02 Scale teeth, performing periodontic debridement using appropriate armamenterium and instrumentation technique.
28.03 Apply appropriate chemo-therapeutic agents.
28.04 Manipulate mechanical instruments for deposit removal, i.e., ultrasonics and prophyjet.
28.05 Perform soft tissue curettage with appropriate instruments.
28.06 Apply desensitizing agents where applicable.
28.07 Clean and polish removable appliances.
28.08 Direct patient in all home therapies to maintain and restore soft tissue health.
28.09 Provide dietary counseling for health maintenance and specific healing needs.
28.10 Provide recommendations for patient use of caries prevention agents.
28.11 Perform expanded functions as permitted by Florida statutes/law pertaining to dentistry.
28.12 Root plane to remove altered cementum.

29.0 IMPLEMENT AND EVALUATE COMMUNITY HEALTH INTERVENTIONS AND RESEARCH ACTIVITIES--The student will be able to:

29.01 Demonstrate knowledge of assessment, planning, implementation and evaluation of community health interventions.
29.02 Formulate and analyze research methodologies for community health interventions.
29.03 Interpret research findings in scientific literature.
29.04 Apply research findings to dental hygiene care delivery.
29.05 Apply statistical analysis to health trends and community interventions.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Dental Laboratory Technology
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170103**
CIP Number	0317.010300
Grade Level	30, 31
Length	1890 hours
Certification	DENTAL TEC $7 $G DEN LABTEC @7 G
Basic Skills	
Math	8
Language	9
Reading	9

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for entry level employment as dental laboratory technicians (89921755) or to provide supplemental training for persons previously or currently employed in this occupation. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

The content of the program includes, but is not limited to, general studies, physical sciences, dental sciences, and dental laboratory techniques.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory activities are integrated with the didactic portion of this program. Students perform representative tasks in the manufacture of dental prostheses.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The program should meet the requirements of the Commission on Accreditation of the Dental and Dental Auxiliary Educational Programs of the American Dental Association. Students should be prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0, Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

Equipment List: A generic equipment list is available for this program and is printed in a supplement to this document.The typical length of this program for the average achieving student is 1890 clock hours which includes 90 clock hours for the Health Careers Core.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

DENTAL LABORATORY TECHNOLOGY (12-17)

12.0 Identify the anatomic structure and function of body systems in relation to prosthetic services performed by the dental laboratory technician.
13.0 Practice quality assurance, safety and acceptable communication skills.
14.0 Adhere to legal and ethical principles related to the practice of dental laboratory technology.
15.0 Demonstrate knowledge of effective business management techniques.
16.0 Demonstrate knowledge of dental sciences.
17.0 Perform basic dental laboratory techniques consistent with current dental laboratory practice.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Dental Laboratory Technology
Secondary Number: H170103
Postsecondary Number:

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

DENTAL LABORATORY TECHNOLOGY--Completion of this module and intended outcomes (12-17) prepares students for the occupation of Dental Laboratory Technician. (89921755)

12.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO PROSTHETIC SERVICES PERFORMED BY THE DENTAL LABORATORY TECHNICIAN--The student will be able to:

12.01 Identify structures and functions of head and neck anatomy.
12.02 Identify embryonic development of head, oral cavity and individual teeth.
12.03 Identify each tooth and its landmarks.
12.04 Demonstrate knowledge, principles, and methods of disease transmission and prevention as related to dental prostheses.
12.05 Demonstrate knowledge of infection control in dental laboratories in accordance with Center for Disease Control (CDC) guidelines.

13.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:

13.01 Practice safety in accordance with institutional policy.
13.02 Identify documentation procedures necessary to comply with state laws.
13.03 Demonstrate knowledge of the dental laboratory technician's role in providing quality assurance in laboratory procedures, reporting, and use and maintenance of equipment.
13.04 Communicate appropriately.
13.05 Use appropriate medical terminology and abbreviations.
13.06 Follow approved procedures for labeling and identifying prostheses.

14.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF DENTAL LABORATORY TECHNOLOGY--The student will be able to:

14.01 Demonstrate knowledge of the importance of observing the doctor/technician relationship.
14.02 Demonstrate knowledge of state law governing the practice of Dental Laboratory Technology.

15.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE BUSINESS MANAGEMENT TECHNIQUES--The student will be able to:

15.01 Demonstrate knowledge of an office/laboratory procedure manual.
15.02 Demonstrate knowledge of business finance and operating expenses.
15.03 Set up a pay scale and benefit program for employees and a bookkeeping system.
15.04 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
15.05 Demonstrate knowledge of employee hiring orientation.

16.0 DEMONSTRATE KNOWLEDGE OF DENTAL SCIENCES--The student will be able to:

16.01 Demonstrate knowledge of physical properties, use and manipulation of dental materials.
16.02 Demonstrate knowledge of the dynamics of occlusion.
16.03 Demonstrate problem solving skills as related to dental materials.

17.0 PERFORM BASIC DENTAL LABORATORY TECHNIQUES CONSISTENT WITH CURRENT DENTAL LABORATORY PRACTICE--The student will be able to:

17.01 Fabricate complete denture prosthesis.
17.02 Fabricate removable partial denture prosthesis.
17.03 Fabricate fixed prosthesis.
17.04 Fabricate fixed porcelain and/or porcelain to metal restorations.
17.05 Fabricate, finish, and polish pedodontic, orthodontic and preventive appliances.
17.06 Fabricate special prosthesis.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Dental Laboratory Technology and Management
Occupational Area:	Health Science Education
	PSV
CIP Number	0317.010301
Grade Level	College Credits
Length	AS Degree/68 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for entry level employment as dental laboratory technicians (89921755), dental laboratory managers, dental laboratory owners, marketing/sales personnel of dental products or to provide supplemental training for persons previously or currently employed in this occupation. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

The content of the program includes, but is not limited to, general studies, physical sciences, dental sciences, dental laboratory techniques, dental laboratory management and business principles, computer applications in the dental laboratory, leadership and communications skills.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through college level instruction, applied laboratory procedures or practice, clinical observation and involvement in the dental health care delivery team concept.

The program will include theoretical aspects of subjects as well as the practical applications. The theoretical aspects of the curriculum will provide content necessary for students to make judgements regarding the procedures they are expected to perform.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory activities are integrated with the didactic portion of this program. Students perform representative tasks in the manufacture of dental prostheses and become involved in the dental health team through first hand observation in clinical procedures as they relate to laboratory techniques.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The program should meet the requirements of the Commission on Accreditation of the Dental and Dental Auxiliary Educational Programs of the American Dental Association. Students should be prepared to take the recognized graduate examination offered by the National Board of Certification for Dental Laboratory Technicians.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupation which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program and is printed in a supplement to this document.

The standard credit hour length for this program is 68 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES**:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.

02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.

03.0 Demonstrate legal and ethical responsibilities.

04.0 Demonstrate an understanding of and apply wellness and disease concepts.

05.0 Recognize and practice safety and security procedures.

06.0 Recognize and respond to emergency situations.

07.0 Recognize and practice infection control procedures.

08.0 Demonstrate computer literacy.

09.0 Demonstrate employability skills.

10.0 Demonstrate knowledge of blood borne diseases, including AIDS.

11.0 Apply basic math and science skills.

DENTAL LABORATORY TECHNOLOGY AND MANAGEMENT (12-19)

12.0 Identify the anatomic structure and function of body systems in relation to prosthetic services performed by the dental laboratory technician.

13.0 Practice quality assurance, safety and acceptable communication skills.

14.0 Adhere to legal and ethical principles related to the practice of dental laboratory technology.

15.0 Demonstrate knowledge of effective business management techniques.

16.0 Demonstrate knowledge of dental sciences.

17.0 Perform basic dental laboratory techniques consistent with current dental laboratory practice.

18.0 Demonstrate knowledge, principles and methods of disease transmission and prevention.

19.0 Demonstrate skills necessary for marketing and sales of dental products.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Dental Laboratory Technology And Management
Secondary Number:
Postsecondary Number: 0317.010301

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

- 01.01 Identify the basic components of the health care delivery system.
- 01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
- 01.03 Describe the composition and functions of a health care team.
- 01.04 Identify the general roles and responsibilities of the individual members of the health care team.
- 01.05 Develop a basic understanding of human needs throughout the lifespan.
- 01.06 Explain the importance of maintaining professional competence through continuing education.
- 01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 02.01 Develop basic listening skills.
- 02.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 02.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 02.04 Respond to verbal and non-verbal cues.
- 02.05 Compose written communication using correct spelling, grammar, and format.
- 02.06 Use appropriate medical terminology and abbreviations.
- 02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
- 02.08 Recognize the importance of patient/client education regarding health care.
- 02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
- 02.10 Demonstrate telephone usage including taking messages.
- 02.11 Demonstrate ability to give and follow directions.
- 02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

DENTAL LABORATORY TECHNOLOGY AND MANAGEMENT--This module and intended outcomes 12-19 equals the occupational completion point of Dental Laboratory Managers and for Dental Laboratory Technicians.

12.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO PROSTHETIC SERVICES PERFORMED BY THE DENTAL LABORATORY TECHNICIAN--The student will be able to:

12.01 Identify structures and functions of head and neck anatomy.
12.02 Identify embryonic development of head, oral cavity and individual teeth.
12.03 Identify each tooth and its landmarks.

13.0 PRACTICE QUALITY ASSURANCE, SAFETY AND ACCEPTABLE COMMUNICATION SKILLS--The student will be able to:

13.01 Practice safety in accordance with institutional policy.
13.02 Identify documentation procedures necessary to comply with state laws.
13.03 Demonstrate knowledge of the dental laboratory technician's role in providing quality assurance in laboratory procedures, reporting, and use and maintenance of equipment.
13.05 Demonstrate knowledge and use of appropriate medical terminology and abbreviations in the field of Dental Laboratory Management.
13.06 Follow approved procedures for labeling and identifying prostheses.
13.07 Write business letters.
13.08 Establish a dental laboratory policy for maintenance of equipment.

14.0 ADHERE TO LEGAL AND ETHICAL PRINCIPLES RELATED TO THE PRACTICE OF DENTAL LABORATORY TECHNOLOGY--The student will be able to:

14.02 Demonstrate knowledge of the importance of observing the doctor/technician relationship.
14.03 Demonstrate knowledge of state law governing the practice of Dental Laboratory Technology.

15.0 DEMONSTRATE KNOWLEDGE OF EFFECTIVE BUSINESS MANAGEMENT TECHNIQUES--The student will be able to:

15.01 Develop an office/laboratory procedure manual.
15.02 Demonstrate knowledge of business finance and operating expenses.
15.03 Set up a pay scale and benefit program for employees and a bookkeeping system.
15.04 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
15.05 Demonstrate knowledge of employee hiring orientation.
15.06 Demonstrate knowledge of computer applications in the dental laboratory.
15.07 Design a dental laboratory and identify appropriate equipment.
15.08 Establish quality control procedures.

16.0 DEMONSTRATE KNOWLEDGE OF DENTAL SCIENCES--The student will be able to:

16.01 Demonstrate knowledge of physical properties, use and manipulation of dental materials.
16.02 Demonstrate knowledge of the dynamics of occlusion.
16.03 Demonstrate problem solving skills as related to dental materials.

17.0 PERFORM BASIC DENTAL LABORATORY TECHNIQUES CONSISTENT WITH CURRENT DENTAL LABORATORY PRACTICE--The student will be able to:

17.01 Fabricate complete denture prosthodontics.
17.02 Fabricate removable partial denture prosthodontics.
17.03 Fabricate fixed prosthodontics.
17.04 Fabricate fixed porcelain and/or porcelain to metal restorations.
17.05 Fabricate, finish, and polish pedodontic, orthodontic and preventive appliances.
17.06 Fabricate special prosthesis.

18.0 DEMONSTRATE KNOWLEDGE, PRINCIPLES, AND METHODS OF DISEASE TRANSMISSION AND PREVENTION--The student will be able to:

18.01 Establish infection control in dental laboratories in accordance with Centers for Disease Control guidelines.
18.02 Demonstrate knowledge, principles and methods of disease transmission and prevention as related to dental prostheses.
18.03 Establish an infection control procedures policy for the dental laboratory.

19.0 DEMONSTRATE SKILLS NECESSARY FOR MARKETING AND SALES OF DENTAL PRODUCTS--The student will be able to:

19.01 Demonstrate effective product evaluation and comparison.
19.02 Identify appropriate consumer populations.
19.03 Discuss dental product application and effectiveness.
19.04 Demonstrate business management skills for record keeping related to marketing.
19.05 Apply economic principles for product distribution and sales.

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Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Electrocardiograph Technology 95-96
Program Type:	Job Preparatory
Occupational Area:	Health Science Education
Components :	Core, One Program, Two Occupational Completion Points. PSAV
Program Numbers	**H170208**
CIP Number	0317.020303
Grade Level:	30, 31
Length:	450 hours
Certification	NURSING ED @5
	LAB TECH @7 G
	EKG @7 G
	PRAC NURSE @7 @G
	LAB ASST @7 G
	REG NURSE G
	PARAMEDIC @7 G
	RESP THER @7 G
Facility Code:	252
VSO:	HOSA
Coop Method:	No
Apprenticeship:	No
Basic Skills	
Math	8
Language	9
Reading	9

I. **PURPOSE:** The program is designed to prepare students for employment as electrocardiograph aides (32926215), electrocardiograph technicians (078.362-018), EKG Technicians (32926215), or to provide supplemental training for persons previously or currently employed in this occupation. The content includes, but is not limited to, communication and interpersonal skills, overview of human anatomy and physiology with emphasis on cardiac and vascular systems, medical terminology and transcription, patient care techniques, medical instrumentation, cardiovascular drugs, interpretation of monitoring and testing results, medical ethics, cardiac wellness and rehabilitation, safe and efficient work practices, CPR, Basic Life Support (BLS) and employability skills.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

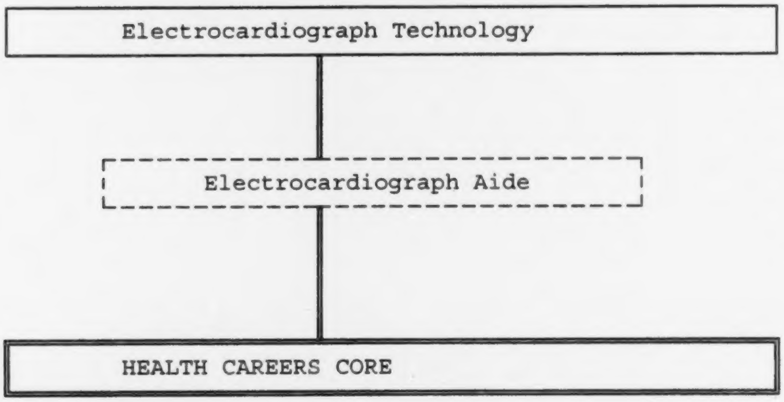
This cluster of programs focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **PROGRAM STRUCTURE:** This cluster is a planned sequence of instruction consisting of a core, one program and two occupational completion points. When the recommended sequence is followed, the structure will allow students to complete specified portions of the program for employment or remain for advanced training.

Students must complete the core, or demonstrate the mastery of skills standards contained in the core, before advancing in the program:

ELECTROCARDIOGRAPH TECHNOLOGY

THE FOLLOWING DIAGRAM ILLUSTRATES THE PROGRAM STRUCTURE



III. **LABORATORY ACTIVITIES:** The laboratory competencies are achieved through simulated practice using standard equipment and supplies found in electrocardiography departments of health care facilities.

IV. **SPECIAL NOTE:** The programs in this cluster meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Health Occupations Students of America, (HOSA) Inc., is the appropriate vocational student organizations as well as a career related professional organizations for providing leadership training experiences and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum [6A-6.064(7),F.S.].

In accordance with Rule 6A-10.040, FAC, the minimum basic skills grade level require for postsecondary adult vocational students to exit the programs in this cluster are listed at the program level or at the occupational completion points within the program. These grade level numbers correspond to a grade equivalent score obtained on one of the state designated basic skills examinations. If a student does meet the basic skills level required for completion from the program, remediation should be provided concurrently in the System for Applied Individualized Learning (SAIL) lab prior to admission in an Adult Basic Education (ABE) setting.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, an d use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this cluster and is printed in a supplement to this document.

V. **INTENDED OUTCOMES**:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OCCUPATIONAL COMPLETION POINT - DATA CODE A **(12.0 - 17.0)**
ELECTROCARDIOGRAPH AIDE - Industry Title

(Students must complete or be concurrently enrolled in a program consisting of the core prior to completing this occupational completion point.)

12.0 Describe the cardiovascular system.
13.0 Describe cardiovascular drugs, their actions, use, and adverse effects.
14.0 Describe and demonstrate cardiac wellness and rehabilitation.
15.0 Identify legal and ethical responsibilities of an EKG aide.
16.0 Demonstrate knowledge of, apply and use medical instrumentation modalities.
17.0 Perform patient care techniques in the health care facility.

OCCUPATIONAL COMPLETION POINT - DATA CODE B (18.0)
EKG TECHNICIAN - OES Code 32926215

(Students must complete or be concurrently enrolled in a program consisting of the core and the EKG Aide competencies prior to completing this occupational completion point.)

18.0 Recognize normal and abnormal monitoring and testing results.

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STUDENT PERFORMANCE STANDARDS

Program Title: Electrocardiograph Technology 95-96
Secondary Number:
Postsecondary Number: H170208

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.

07.02 Demonstrate knowledge of surgical asepsis.

07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.

08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.

09.02 Secure information about a job.

09.03 Identify documents that may be required when applying for a job.

09.04 Complete a job application form correctly.

09.05 Demonstrate competence in job interview techniques.

09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

09.07 Identify acceptable work habits.

09.08 Demonstrate knowledge of how to make job changes appropriately.

09.09 Demonstrate desirable health habits.

09.10 Recognize appropriate affective/professional behavior.

09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.

10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

ELECTROCARDIOGRAPH AIDE: The intended outcome (12-17) completes the occupational completion point of Electrocardiograph Aide. (Industry Title)

12.0 DESCRIBE THE CARDIOVASCULAR SYSTEM--The student will be able to:

12.01 Locate the heart and surrounding structures.
12.02 Diagram and label the parts of the heart and list the functions of each labeled part.
12.03 Trace the flow of blood through the cardiopulmonary system.
12.04 Identify and describe the electrical conduction system.

13.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE AND ADVERSE EFFECTS--The student will be able to:

13.01 Describe mechanisms by which cardiovascular drugs work.
13.02 List common cardiovascular drugs.
13.03 Identify and respond to cardiac emergency.
13.04 State actions and adverse effects of commonly used cardiovascular drugs.
13.05 Differentiate between normal and abnormal EKG changes due to drugs.

14.0 DESCRIBE AND DEMONSTRATE CARDIAC WELLNESS AND REHABILITATION--The student will be able to:

14.01 Identify predisposing factors to heart disease.
14.02 Describe the American Heart Association diet.
14.03 Explain behavior modification and stress management.
14.04 Describe principles of physical fitness and exercise.
14.05 Perform physical exercise and demonstrate physical fitness.

15.0 IDENTIFY LEGAL AND ETHICAL RESPONSIBILITIES OF AN EKG AIDE--The student will be able to:

15.01 Recognize and practice legal and ethical responsibilities as they relate to an EKG aide.
15.02 Maintain a safe and efficient work environment.
15.03 Maintain EKG equipment so it will be safe and accurate.

16.0 DEMONSTRATE KNOWLEDGE OF, APPLY AND USE MEDICAL INSTRUMENTATION MODALITIES--The student will be able to:

16.01 Calibrate and standardize the cardiograph instrument.
16.02 Identify three types of lead systems.
16.03 Demonstrate proper lead placement.
16.04 Identify artifacts and mechanical problems.
16.05 Perform and assess a 12 lead EKG.
16.06 Describe the Holter monitoring and scanning exercise treatment.
16.07 Describe other modalities of cardiovascular diagnosis and interpretation.
16.08 Use charting and documentation skills.
16.09 State Einthoven's triangle.

17.0 PERFORM PATIENT CARE TECHNIQUES IN THE HEALTH CARE FACILITY--The student will be able to:

17.01 Describe the physical and mental preparation of the patient for cardiovascular testing.
17.02 Identify patient and verify the requisition order.
17.03 Prepare patient for cardiovascular diagnostic testing.
17.04 Measure and record patient's vital signs and recognize and report abnormalitites.
17.05 State precautions required when performing diagnostic procedures.

ELECTROCARDIOGRAPH TECHNOLOGY: The intended outcome (18) completes the occupational completion point of Electrocardiograph Technology. (32926215)

18.0 RECOGNIZE NORMAL AND ABNORMAL MONITORING AND TESTING RESULTS--The student will be able to:

18.01 Measure waves, segments, complexes, rates and intervals.
18.02 Identify electrical axis.
18.03 List purposes for pacemakers and indications for insertion.
18.04 Recognize normal and deviations from normal sinus rhythms.
18.05 Recognize normal and deviations from normal atrial rhythms.
18.06 Recognize normal and deviations from normal atrio-venticular rhythms.
18.07 Recognize normal and deviations from normal ventricular rhythms.
18.08 Recognize normal and deviations from normal types of heart blocks.
18.09 Recognize normal and deviations from normal pacemaker rhythms.
18.10 Recognize normal and deviations from normal types of myocardial ischemia and infarction.
18.11 Recognize normal and deviations from normal atrial and ventricular hypertrophies.
18.12 Recognize normal and deviations from normal extrasystole and other rare phenomena.
18.13 Recognize normal and deviations from normal 12 lead EKG results.
18.14 Recognize and describe AV block.

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Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Electroneurodiagnostic Technology
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170204**
CIP Number	0317.020400
Grade Level	30, 31
Length	1200 hours
Certification	ENCEPHALGH @7 G
Basic Skills	
Math	10
Language	11
Reading	11

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as electroneurodiagnostic technologists or to provide supplemental training for persons previously or currently employed in these occupation.

The content includes, but is not limited to, recording and measurement procedures, EEG techniques, EEG patterns, EP techniques, patient safety, appropriate healthcare, communication, medical terminology, ethical and legal considerations, equipment use, instrument care, troubleshooting, neuroanatomy, neurophysiology, effects of medications on tracings, nerve conduction techniques, neuropathology, basic electronics for biomedical instrumentation, patient history taking, patient rapport, neonatal studies, using portable equipment, other neurodiagnostic procedures, electrocorticography, techniques of laboratory management, polysomnographic techniques, employability skills, electrical safety, CPR and First Aide.

Reinforcement of basic skills in English, mathematics, basic anatomy and physiology, and physical science, appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES**: Laboratory activities are essential for this program, with clinical experiences accounting for nearly one-half of the required time. Clinical experience must be obtained in accredited institutions with which the school has written contractual agreements, including safe student-teacher ratios. Faculty must be responsible for the selection of activities assigned to students in the clinical setting.

III. **SPECIAL NOTE**: Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program. The American Society of Electroencephalographic

Technologists, Inc. (ASET), is a professional organization that provides members a monthly newsletter and clinical/technical journal. ASET sponsors national educational seminars in electroneurodiagnostics. Job opportunities are also advertised through ASET. Student membership is available through ASET, and there are state and regional societies that students can join, which also offer similar opportunities to those available through ASET.

The program should be approved by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Program graduates are eligible to take the registry examination of (ABRET), the American Board of Registration of Electroencephalographic Technologists, for designation as R. EEG T.

In accordance with Section 233.0695 F.S., the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0, Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

The typical length of this program for the average achieving student is 12 months. (1200 hours)

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

01.0 Communicate effectively with patients, family and other health care personnel.
02.0 Take and abstract patient histories.
03.0 Apply recording electrodes and use EEG/EP techniques.
04.0 Operate EEG equipment.
05.0 Perform personal, patient, and equipment electrical safety procedures.
06.0 Select and apply patient specific EEG techniques.
07.0 Recognize and categorize the EEG activity displayed.
08.0 Recognize,identify and/or correct artifacts.
09.0 Manage medical emergencies.
10.0 Recognize and correct instrument faults.
11.0 Debrief patients.
12.0 Demonstrate knowledge of electrocortical and depth recording procedures.
13.0 Demonstrate knowledge for performance of electrocerebral silence recording.

14.0 Prepare descriptive reports of recordings for use by the electroencephalographer.

15.0 Identify skills needed to manage an EEG laboratory.

16.0 Describe how to keep laboratory records.

17.0 Schedule appointments.

18.0 List appropriate supplies needed.

19.0 Demonstrate knowledge of (EP) evoke potential equipment operation.

20.0 Demonstrate knowledge of (NCV) nerve conduction velocity techniques.

21.0 Demonstrate knowledge of (PSG) polysomnographic techniques.

22.0 Demonstrate employability skills.

23.0 Demonstrate knowledge of infectious disease processes and procedures, including AIDS.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Electroneurodiagnostic Technology
Secondary Number:
Postsecondary Number: H170204

01.0 COMMUNICATE EFFECTIVELY WITH PATIENTS, FAMILY, AND OTHER HEALTH CARE PERSONNEL--The student will be able to:

01.01 Explain EEG procedure to patient.
01.02 Provide attendant nursing skills for handling severely ill patients and apply emergency procedures.
01.03 Observe patient for stability or changes in respiration, circulation, color, skin moisture, and consciousness level.
01.04 Recognize and report symptoms of abuse and neglect.
01.05 Demonstrate social skills and attitudes appropriate to employment in a health care facility.
01.06 Display respect for patients regardless of race, religion, color, creed, sex, age, or diagnosis.
01.07 Display a professional and positive attitude in dealing with patients.
01.08 Maintain confidentiality of all patient records and information.
01.09 Discuss with the patient only that information already known by the patient.
01.10 Discuss the patient's condition only when out of audible range of the patient/family and only with appropriate supervisors.
01.11 Document the clinical condition of the patient.

02.0 TAKE AND ABSTRACT PATIENT HISTORIES--The student will be able to:

02.01 Introduce self to patient, identify patient.
02.02 Explain necessity for obtaining information to patient to elicit patient's cooperation within the limits of his/her physical and mental status.
02.03 Review chart for physicians' orders, admission notes, test results, surgical procedures, nurses' notes, physical examination, progress notes and medications administered.
02.04 Question patient for chief complaint, description and sequence of symptoms, past history, family history and note any physical defects.
02.05 List all medications and pertinent information in appropriate places.
02.06 Observe patient and note behavior.
02.07 Abstract the data obtained above.

03.0 APPLY RECORDING ELECTRODES AND USE EEG/EP TECHNIQUES--The student will be able to:

03.01 Perform head measurements.

03.02 Apply electrodes according to the specifications of International 10-20 Electrode placement within accuracy tolerances and time limits.
03.03 Describe electrode application, montages, and protocol for neonate recordings and electrocerebral silence study.
03.04 Apply non cerebral monitors for EKG - EOG - EMG and/or reference recording.
03.05 Describe and perform various methods of applications such as electrode paste, collodian, and needle electrode insertion.
03.06 Describe special electrode procedures such as nasopharyngeal, T1/T2 placements, sphenoidal electrodes and prime electrode placements.
03.07 Clean patient hair and scalp of all marks and preparation solutions used during the recording.

04.0 OPERATE EEG EQUIPMENT--The student will be able to:

04.01 Calibrate the EEG instrument in preparation for a procedure by aligning the pen alignment, pen spacing, time axis, electrical baseline, amplitude adjustment, mechanical baseline, measuring the pen deflection at 7mm, listing the electrode impedances, selecting the Bio Cal montage, labeling the parameters of sensitivity, high linear frequency control and low linear frequency control or time constant.
04.02 Perform bio-calibration.
04.03 Adjust and identify instrumentation settings used during the recording of special recordings such as electrocerebral silence procedures.
04.04 Evaluate adequate functioning of equipment and identify different features of various commercial EEG instrumentation.
04.05 Adjust and identify instrumentation settings used during special recordings such as, HLF, LLF, 60Hz, sensitivity, fast and slow paper speeds.
04.06 Select and label routine montages by memory.
04.07 Make appropriate adjustments to enhance routine recordings.
04.08 Note behavior of patient of EEG: position, consciousness level, movement, clinical correlation.
04.09 Draw and describe frequency response curves and the EEG convention of polarity.

05.0 PERFORM PERSONAL, PATIENT, AND EQUIPMENT ELECTRICAL SAFETY PROCEDURES--The student will be able to:

05.01 Direct the activities of the patient, insuring safety and comfort while maintaining a controlled environment.
05.02 Protect equipment from harm due to cardiac defibrillation procedures, etc.
05.03 Protect self as directed in many situations avoiding contact with live electrical wires or outlets, wear protective gear.

06.0 SELECT AND APPLY PATIENT SPECIFIC EEG TECHNIQUES--The student will be able to:

06.01 Identify and describe invasive and non-invasive neurological diagnostic procedures.
06.02 Describe the criteria and procedure for insertion of nasopharyngeals and assist with sphenoidals.
06.03 Perform photic stimulation and describe/recognize photic evoked response, photomyoclonus and photo convulsive response.
06.04 Monitor hyperventilation and post hyperventilation and minuses for post hyperventilation. Describe hyperventilation findings and contraindications.
06.05 Determine polarity of cerebral potentials and eye movements.
06.06 Select or design montages to determine electrical field distribution of generalized and/or localized EEG abnormalities.
06.07 Recognize the diagnostic limitations of special related procedures and the criteria for their selection.
06.08 Calculate dosage and administer oral medication under minimal supervision.
06.09 Perform noxious stimulation of the patient with decreased consciousness when indicated with assistance as available.
06.10 Perform a neonatal recording and a nasopharyngeal recording.
06.11 Describe the three modalities of EP recording.
06.12 Describe polysomnographic recordings.

07.0 RECOGNIZE AND CATEGORIZE THE EEG ACTIVITY DISPLAYED--The student will be able to:

07.01 Identify normal activity in adults and variants of age correlates.
07.02 Describe/recognize five stages of sleep: I, II, III, IV, and REM.
07.03 Identify sedatives, tranquilizers, anticonvulsants, and medications for activation procedures that correlate with EEG changes.
07.04 Recognize abnormal electrocerebral potential and interpret significance during recording procedure.
07.05 Recognize abnormal electrocerebral potential: focal, paroxysmal, lateralized, and generalized.
07.06 Recognize and categorize normal and abnormal EEG patterns and artifacts and correlate these phenomena with the patient's neurological examination and diagnosis and environment, respectively.
07.07 Review, describe, and critique tracings with clinical supervisor, EEG instructor and electroencephalographer.
07.08 Prepare a descriptive analysis of the EEG tracing.
07.09 Identify space occupying lesions and gross neuropathology and discuss EEG pattern correlation.

08.0 RECOGNIZE, IDENTIFY AND/OR CORRECT ARTIFACTS--The student will be able to:

08.01 Recognize, monitor and/or eliminate physiological artifacts such as EKG, EMG, EOG, pulse and sweat.
08.02 Recognize and eliminate instrumental artifacts such as pops and 60Hz, and equipment malfunction.

08.03 Recognize, eliminate and/or monitor external environmental artifacts such as electrostatic interference.

09.0 MANAGE MEDICAL EMERGENCIES--The student will be able to:

09.01 Perform CPR/BCLS - C
09.02 Perform basic First Aid Procedures.
09.03 Describe restraining techniques on a patient who presents a danger to self or others as directed.
09.04 Report immediately any changes in patient's level of consciousness, respiration, circulation, or color.

10.0 RECOGNIZE AND CORRECT INSTRUMENT FAULTS--The student will be able to:

10.01 Report any malfunctioning equipment
10.02 Perform routine care/maintenance on equipment.
10.03 Troubleshoot, identify and correct malfunctions as described in the equipment manual.

11.0 DEBRIEF PATIENTS--The student will be able to:

11.01 Make certain that the patient has been informed about the activity/procedure performed.
11.02 Protect/return all personal items belonging to patient that were removed in the lab (e.g., glasses, dentures, earrings, wig, toupee, barrettes) and make certain that the patient has been informed.
11.03 Insure patient safety by using bed rails, wheel locks and safety belts.

12.0 DEMONSTRATE KNOWLEDGE OF ELECTROCORTICAL AND DEPTH RECORDING PROCEDURES--The student will be able to:

12.01 Design montages to determine electrical field distribution of generalized and/or localized EEG abnormalities.
12.02 State the criteria for electrocorticography and describe the EEG technologist's role during surgery.
12.03 Describe the mechanism of neuronal function, synaptic transmission, volume conduction, cortico-thalmic projection system and neuronal basis of electrocerebral potential.

13.0 DEMONSTRATE KNOWLEDGE FOR PERFORMANCE OF ELECTROCEREBRAL SILENCE RECORDING--The student will be able to:

13.01 List the criteria for minimal technical standards of an electrocerebral silence (ECS) recording.
13.02 Perform an ECS recording.
13.03 Describe the three types of clinical evoked potentials and diagnostic function.

14.0 PREPARE DESCRIPTIVE REPORTS OF RECORDINGS FOR USE BY THE ELECTROENCEPHALOGRAPHER--The student will be able to:

14.01 Communicate effectively/appropriately with department personnel, hospital staff and physicians.
14.02 Prepare technical report of each recording.
14.03 Record all information accurately.
14.04 Discuss patient information only with other appropriate medical personnel.

15.0 IDENTIFY SKILLS NEEDED TO MANAGE AN EEG LABORATORY--The student will be able to:

15.01 Recognize and locate billing forms and computer.
15.02 Identify and refer to procedure manual.
15.03 Recognize reports for patient charts.
15.04 Clean, maintain, and stock the instrument, linen supply, pedigo cart, and cabinets of the EEG laboratory every day.
15.05 Sanitize all parts of equipment utilized: electrodes, stethoscope ear pieces, etc.
15.06 Identify infection control policies.
15.07 Identify equipment/repairs as needed.

16.0 DESCRIBE HOW TO KEEP LABORATORY RECORDS--The student will be able to:

16.01 File records.
16.02 File maintenance reports and records of equipment inspections.
16.03 Identify employee evaluation forms and standards.
16.04 Identify forms, recognize need for, and implement incident reports.

17.0 SCHEDULE APPOINTMENTS--The student will be able to:

17.01 Schedule patient appointments according to agency policies and patient requirements.
17.02 Recognize urgency of requests for services and respond appropriately.
17.03 Respond to STATS.

18.0 LIST APPROPRIATE SUPPLIES NEEDED--The student will be able to:

18.01 Identify inventory needs of a laboratory.
18.02 Prepare mock requisition sheets.

19.0 DEMONSTRATE KNOWLEDGE OF (EP) EVOKE POTENTIAL EQUIPMENT OPERATION--The student will be able to:

19.01 Describe the three modalities of EP testing.
19.02 Apply the proper electrodes for all three modalities of EP testing.
19.03 Recognize and describe displayed EP waveforms for all three modalities.

20.0 DEMONSTRATE KNOWLEDGE OF (NCV) NERVE CONDUCTION VELOCITY TECHNIQUES--The student will be able to:

20.01 Describe a typical NCV test.

20.02 Applying proper electrodes for a median, ulner and post-tibial NCV test.
20.03 Describe and recognize the waveforms obtained on a NCV test.

21.0 DEMONSTRATE KNOWLEDGE OF (PSG) POLYSOMNOGRAPHIC TECHNIQUES--The student will be able to:

21.01 Describe the reasons for a PSG test.
21.02 Apply proper electrodes for a PSG test.
21.03 Recognize and describe the different types of PSG testing.

22.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

22.01 Conduct a job search.
22.02 Secure information about a job.
22.03 Identify documents that may be required when applying for a job.
22.04 Complete a job application properly.
22.05 Demonstrate competence in mock job interview techniques.
22.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
22.07 Identify acceptable work habits.
22.08 Demonstrate knowledge of how to make job changes appropriately.
22.09 Demonstrate acceptable employee health habits.

23.0 DEMONSTRATE KNOWLEDGE OF INFECTIOUS DISEASE PROCESSES AND PROCEDURES, INCLUDING AIDS--The student will be able to:

23.01 Apply infection control techniques for airborne, and blood borne pathogens.
23.02 Perform reverse isolation.
23.03 Perform techniques of Universal Precautions according to Centers for Disease Control (CDC) guidelines.
23.04 Distinguish between fact and fallacy about the transmission of immunodeficiency diseases.
23.05 Identify community resources and services available to the victims of immunodeficiency diseases.
23.06 Identify "at risk" behaviors that promote the spread of AIDS and the public education necessary to combat the spread of immunodeficiency diseases.
23.07 Apply infection control techniques designed to prevent the spread of immunodeficiency diseases to the care of all patients including those with blood borne diseases following Centers for Disease Control (CDC) guidelines.
23.08 Demonstrate knowledge of the legal aspects of AIDS.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Emergency Medical Services - Associate Degree
Occupational Area: Health Science Education

PSV

CIP Number 0317.020601
Grade Level College Credits
Length AS Degree/73 credit hours

I. **MAJOR CONCEPTS/CONTENT**: Through the use of common core courses and the addition of several optional courses, this program is designed to prepare students for employment in the following occupational areas:

Management Option: EMS Coordinator (079.117-010), EMS Supervisor, EMS Shift Supervisor, Operations Manager, EMS Manager, or Director of EMS Services.

Education Option: Field Training Officer, Inservice Training Officer, or EMS Instructor, or to provide supplemental training for persons previously or currently employed in these occupations. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services; and the curriculum must adhere to the U.S. Department of Transportation National Standard Curriculum.

The content includes, but is not limited to, the advanced recognition, assessment and advanced management of medical, trauma, psychological and behavioral and obstetrical emergencies under the direction of a physician, anatomy and physiology, medical-legal aspects, medical terminology, intravenous access, pharmacology, advanced airway management, medication administration, defibrillation and cardioversion, and cardiac arrhythmias.

The management option content also includes leadership, motivation and business management skills, communication, stress reduction and management, employee interview and personnel skills, employee retention, business law, and labor relations.

The program shall also include general education courses in English, oral communications, mathematics, natural sciences, and social sciences as currently required for degree programs by the Southern Association of Colleges and Schools (SACS). The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor with a student-teacher ratio not to exceed 6:1. The Human Patient Simulator (HPS) may be used to fulfill or enhance some clinical hours with prior approval of governing boards and/or accrediting agencies.

Clinical Activities: The Joint Review Committee on Educational Programs for the EMT-Paramedic requires supervised clinical experience during which time the student-teacher ratio shall not exceed 6:1.

Management practicum shall be provided in an agency which will provide the student with the opportunity to observe and practice the learning objectives.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

An EMS program must be taught by a Florida certified paramedic with 2 years experience, meeting the qualifications as set forth in 10D-66.0586(5)(e). The program must be accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

An appropriate student organization for providing the development of professionalism and leadership skills should be provided. These organizations may include Health Occupations Students of America, Inc. (HOSA), or an organization of the school's choice. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C. This suggestion was made in light of the nature of EMT and Paramedic students which includes the adult learner already involved in unions and EMS professional groups as well as the newly graduated high school senior. Emergency Medical Technician (EMT) certification is required for admittance into the program.

In accordance with State Board of Education Rule 6A-10.0315, minimum basic skill levels have been established for admittance into a college associate degree program.

Intended outcomes from 1-40 include all the outcomes for the paramedic program (0317.020600). The medical procedures performed by a Paramedic must be performed under the direction of a licensed physician with appropriate emergency experience according to Chapter 10D-66, Florida administrative Code.

The receiving institution must grant the same number of credits to entering paramedics as those granted to their own native students.

NOTE: When the word demonstrate is used in a standard, it shall require that actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

The Student Performance Standards shall include, but not be limited to, all those objectives identified in the current U.S. Department of Transportation, National Standard Curriculum for the EMT-Paramedic, Instructor Lesson Plans.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program/cluster printed in a supplement to this document.

The standard credit hour length for this program is 73 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES:**

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

PARAMEDIC (12-40)

12.0 Demonstrate knowledge of the paramedic profession.
13.0 Describe EMS systems.
14.0 Describe medical/legal considerations.
15.0 Describe and demonstrate EMS communications systems.
16.0 Demonstrate rescue techniques and extrication.
17.0 Describe major incident response.
18.0 Describe and manage causes of stress.
19.0 Use medical terms specific to EMS.
20.0 Demonstrate general patient assessment and initial management.
21.0 Manage airway and ventilation.
22.0 Assess and manage shock.
23.0 Demonstrate knowledge of pharmacology and administer medications.
24.0 Assess and manage trauma emergencies.
25.0 Assess and manage burn injuries.
26.0 Assess and manage respiratory emergencies.
27.0 Assess and manage cardiovascular emergencies.
28.0 Assess and manage endocrine emergencies.
29.0 Assess and manage neurological emergencies.
30.0 Assess and manage digestive, genitourinary, and reproductive emergencies.
31.0 Assess and manage anaphylaxis emergencies.
32.0 Assess and manage toxicological, alcohol, and drug abuse emergencies.
33.0 Assess and manage infectious diseases.
34.0 Assess and manage environmental injuries.
35.0 Assess and manage geriatric emergencies.
36.0 Assess and manage pediatric emergencies.
37.0 Assess and manage the gynecologic patient.
38.0 Assess and manage the obstetric patient.
39.0 Assess and manage the neonate.
40.0 Assess and manage behavioral emergencies.

MANAGEMENT OPTION (41-51)

41.0 Demonstrate leadership and administrative skills basic to management emergency medical service systems.
42.0 Interpret federal, state and local laws as they apply to emergency medical service systems.
43.0 Demonstrate knowledge of operational and organizational structures of emergency medical service systems.
44.0 Demonstrate knowledge of psychological problems and stressors in emergency medical service employees and find appropriate solutions.
45.0 Demonstrate knowledge of materials and supplies used in emergency medical service systems.
46.0 Demonstrate knowledge of occupational safety and health.
47.0 Demonstrate knowledge of appropriate workloads for each employee.
48.0 Review, approve and monitor departmental capital and operational budgets.
49.0 Identify and apply legal reimbursement systems.

50.0 Comply with accreditation standards of governmental or governmental-appointed agencies and organizations.
51.0 Demonstrate computer literacy.

EDUCATION OPTION (52-57)

52.0 Demonstrate knowledge of basic teaching methods, learning and educational psychology.
53.0 Describe and discuss curriculum design and development.
54.0 Demonstrate appropriate measurement and evaluation skills.
55.0 Demonstrate mastery of required technical skills.
56.0 Demonstrate classroom management skills.
57.0 Demonstrate computer literacy.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Emergency Medical Services - Associate Degree
Secondary Number:
Postsecondary Number: 0317.020601

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PARAMEDIC: Intended outcomes 12-40 lead to the occupational completion point of paramedic and students completing these outcomes may take the licensure exam for Paramedic.

12.0 DEMONSTRATE KNOWLEDGE OF THE PARAMEDIC PROFESSION--The student will be able to:

12.01 Define the role and responsibilities of the paramedic.
12.02 Describe and contrast the differences between the various levels of training, from EMT to Paramedic.
12.03 List current state requirements for paramedic certification and recertification.
12.04 Discuss Chapter 401, Florida Statutes, and Chapter 10D-66, Florida Administrative Code.
12.05 State the major purposes of a national association, a national registry, and professional journals.
12.06 State the benefits of paramedics teaching in their community.
12.07 Define continuing education, certification, licensure and registration.

13.0 DESCRIBE EMS SYSTEMS--The student will be able to:

13.01 Define and describe Medical Control and physician responsibility.
13.02 Discuss pre-hospital stabilization of patients.
13.03 Discuss the general differences between management of trauma and medical patients.
13.04 Define and discuss protocols and their development.
13.05 Describe the relationship between prehospital care and total patient care including the emergency department, and hospital specialty departments.
13.06 Describe the continuum of patient care and the responsibilities of the paramedic within the transfer of patient responsibility.
13.07 Discuss the development, implementation, and control of an EMS system.
13.08 Discuss response of the EMS system including system access, dispatcher responsibilities, patient evaluation, medical command, and patient responsibility.
13.09 Discuss promulgation of national standards such as KKK ambulance standards, and involvement of groups such as ASTM,

NCSEMSTC, American College of Surgeons, American Medical Association Joint Review Committee, and the U.S. Dpeartment of Transportation.

13.10 Discuss the various paramedic-physician relationships.

13.11 Describe retrospective evaluation of patient care including run report review, continuing education, skill practice, and skill deterioration.

13.12 Discuss the EMT-P's initial responsibilities when arriving on the scene.

14.0 DESCRIBE MEDICAL/LEGAL CONSIDERATIONS--The student will be able to:

14.01 Discuss the scope and significance of current national and Florida laws and administrative rules relating to the paramedic.

14.02 Discuss medical-legal concepts relating to the paramedic.

14.03 Discuss the need for accurate medical documentation and recordkeeping.

14.04 Discuss the extent to which force and restraint may be used to protect the patient, the Paramedic, and third parties.

14.05 Identify those circumstances that require the Paramedic to report incidents to law enforcement and/or other appropriate authorities.

15.0 DESCRIBE AND DEMONSTRATE EMS COMMUNICATIONS SYSTEMS--The student will be able to:

15.01 Describe the phases of communication necessary to complete a typical EMS event.

15.02 Define and describe essential communication equipment.

15.03 Describe various EMS communication systems and the advantages and disadvantages of each.

15.04 Describe factors affecting interference, range and clarity of base, vehicle and portable radio communications.

15.05 Describe the functions and responsibilities of the F.C.C.

15.06 Describe the functions and responsibilities of the EMS dispatcher.

15.07 Describe purposes and methods of verbal communication of patient information to the hospital and to the physician.

15.08 Organize a patient presentation in the proper order for radio transmission to the physician.

15.09 Describe the importance of written medical protocols and the written EMS run report.

15.10 Demonstrate the proper use of portable and mobile transmitter/receivers in a real or simulated patient situation.

15.11 Discuss uses of biotelemetry equipment.

15.12 Complete a written EMS report based on a real or simulated patient situation.

16.0 DEMONSTRATE RESCUE TECHNIQUES AND EXTRICATION--The student will be able to:

16.01 Identify possible hazards when given a description of a scene and describe the procedures for handling the hazards.

16.02 Identify and/or describe the equipment used and the techniques necessary for gaining access to, packaging, extricating and transporting patients trapped within a vehicle or other confinement.
16.03 Describe the integration of patient care into the process of patient disentanglement and rescue.
16.04 Identify proper response in the presence of hazardous materials and name proper hazardous materials authorities that should be notified.
16.05 Manage scene and safe patient access.
16.06 Discuss removal and transport of the patient from the scene.
16.07 Demonstrate the procedures and operation of equipment used for gaining access to, packaging, extricating, and transporting patients trapped or confined in a vehicle or other type of entrapment.
16.08 Demonstrate techniques for lifting and handling patients with and without spine injuries and/or other special injury problems utilizing the specialized equipment found on a rescue vehicle.

17.0 DESCRIBE MAJOR INCIDENT RESPONSE--The student will be able to:

17.01 Define mass casualty incident (MCI) and when it should be declared.
17.02 Describe the "pre-planning phase" and "response planning".
17.03 Discuss MCI communications.
17.04 Describe the components of special resources.
17.05 Describe the function of "scene command", "scene triage", and the "transferring command function".
17.06 Describe section and staging management and a system for patient identification.
17.07 Discuss on-scene medical control.

18.0 DESCRIBE AND MANAGE CAUSES OF STRESS--The student will be able to:

18.01 Define stress and discuss its causes and phases.
18.02 Describe common physiologic responses to stress and its effects.
18.03 Describe factors that determine whether anxiety is a positive or negative response.
18.04 Describe behavior that is a manifestation of stress in patients, patients' families and the paramedic.
18.05 Describe common causes of job-related stress and various techniques of paramedic stress management.
18.06 Describe the stages of the grief process and common needs of the patient, the family and the paramedic in dealing with death and dying.
18.07 Describe common management techniques used by the paramedic when a patient is dead or dying.
18.08 Discuss areas of controversy in prehospital care involving death and dying.

19.0 USE MEDICAL TERMS SPECIFIC TO EMS--The student will be able to:

19.01 Read, write, use and respond correctly to terms specific to EMS.
19.02 Read, write, use and respond correctly to abbreviations specific to EMS.

20.0 DEMONSTRATE GENERAL PATIENT ASSESSMENT AND INITIAL MANAGEMENT--The student will be able to:

20.01 Establish priorities of care based on threat to life and describe the treatment modalities for the management of these conditions.
20.02 Describe the primary and secondary survey.
20.03 Describe the anatomy, physiology and pathophysiology of the airway and lungs and their anatomical structures.
20.04 Describe the use of adjuncts in airway management.
20.05 Describe advanced methods of airway management.
20.06 Explain the significance of protection of the cervical spine in airway management.
20.07 Explain pulmonary ventilation and gas exchange across the alveolar-capillary membrane.
20.08 Describe the pathophysiology of open and closed pulmonary injuries.
20.09 Discuss the techniques for evaluating effectiveness of ventilation.
20.10 Describe the anatomy and physiology of the heart and the cardiovascular system.
20.11 Describe the pathophysiology of cardiac arrest.
20.12 Describe the mechanisms of evaluating the effectivensss of perfusion.
20.13 Describe hemorrhage control and its benefits and complications.
20.14 Assess neurological status.
20.15 Discuss the pathophysiology of shock.
20.16 Define the trauma score and its usefulness.
20.17 Demonstrate obtaining a relevant patient medical history.
20.18 Describe how a patient is packaged and stabilized for transportation to the hospital.
20.19 Discuss procedures for hospital selection, the transportation phase, and patient monitoring enroute to the hospital.
20.20 Perform a rapid assessment.
20.21 Perform a secondary survey.
20.22 Demonstrate cardiopulmonary resuscitation.

21.0 MANAGE AIRWAY AND VENTILATION--The student will be able to:

21.01 Describe and discuss techniques of advanced airway management, to include intubation and surgical procedures.
21.02 Demonstrate methods of airway management on adult, child, and intact manikins both manually and with adjunctive equipment.
21.03 Demonstrate methods for assessing continued adequacy of airway management and ventilation when using advanced airway devices.
21.04 Demonstrate use of portable and fixed suction devices for oropharyngeal and tracheal suctioning.

22.0 ASSESS AND MANAGE SHOCK--The student will be able to:

22.01 Identify and describe the causes, pathophysiology signs, symptoms, clinical manifestations, and management of shock.
22.02 Describe fluids, fluid transport, and fluid and electrolyte imbalances.
22.03 Discuss resuscitation of the shock patient.
22.04 Discuss the hemodynamics of the cardiovascular system.
22.05 Discuss differences in IV fluid composition and their implications in fluid administration.
22.06 Describe baroreceptors and their affect on blood pressure and perfusion.
22.07 Describe compensated and uncompensated shock.
22.08 Discuss evaluation of the patient's perfusion status.
22.09 Define and discuss acid-base balance.
22.10 Describe indications and contraindications of the pneumatic anti-shock garment.
22.11 Discuss the methods of fluid replacement and the advantages and disadvantages of each.
22.12 Demonstrate, in order of priority, the steps in shock resuscitation.
22.13 Demonstrate the use of the pneumatic anti-shock garment.
22.14 Demonstrate proper technique of setting up intravenous fluids for administration.
22.15 Demonstrate proper technique of peripheral and external jugular venous cannulation on the adult, child and infant patient.
22.16 Demonstrate proper techniques for trouble-shooting an intravenous infusion.
22.17 Calculate fluid administration rates for intravenous fluids utilizing a variety of administration sets.

23.0 DEMONSTRATE KNOWLEDGE OF PHARMACOLOGY AND ADMINISTER MEDICATIONS--The student will be able to:

23.01 Discuss the various origins and forms of drugs.
23.02 Discuss the various names of a drug (ie. generic, trade, official, chemical).
23.03 Identify those agencies responsible for regulating drugs and the rationale for regulation.
23.04 Demonstrate use of the Physicians Desk Reference.
23.05 Identify local and systemic effects of drugs.
23.06 List and evaluate effects of various factors on the action of drugs.
23.07 Discuss the methods of drug absorption.
23.08 Define and use relevant pharmacology terms.
23.09 Describe and discuss the apothecary and metric systems and convert between and within the systems.
23.10 Describe the various types of drugs and routes of administration.
23.11 Calculate fractional drug dosages.
23.12 State the advantages and disadvantages of subcutaneous, intramuscular, intravenous, and transtracheal injections.
23.13 Demonstrate the proper procedure for intramuscular, subcutaneous, intravenous piggyback, intravenous bolus, and transtracheal medication administration.
23.14 Demonstrate the proper procedure for withdrawing medication from a glass vial and a glass ampule.

24.0 ASSESS AND MANAGE TRAUMA EMERGENCIES--The student will be able to:

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24.01 Describe the general care and transportation of the trauma patient.
24.02 Describe the priorities of trauma care and triage with multiple patients.
24.03 Describe the anatomy, physiology, pathophysiology assessment, and management of trauma to all regions of the human body.
24.04 Describe and demonstrate methods of hemorrhage control.
24.05 Describe neurological examination, assessment, pathophysiology, and management.
24.06 Describe rapid on-scene management of the trauma patient.
24.07 Describe the components of a complete prehospital history and the significance of each.
24.08 Describe various types of splints that are used for immobilization of fractures and dislocations, their use and the advantages and disadvantages of each.
24.09 Describe the short and long backboard, the various state-of-the-art substitutes available, and their specific uses.
24.10 Describe various systems designed for scoring the severity of injuries to the trauma patient and contrast with them with the Florida Trauma Scorecard as identified in Chapter 10D-66, F.A.C.
24.11 Identify and describe the use of a trauma score in quantifying patient condition.
24.12 Demonstrate advanced methods of airway management and ventilation in the trauma patient.
24.13 Demonstrate decompression of a tension pneumothorax.
24.14 Demonstrate application of pneumatic anti-shock garment (MAST).
24.15 Describe and demonstrate physical examination of the trauma patient.
24.16 Demonstrate a neurological examination as performed on the trauma patient.
24.17 Demonstrate immobilization of the cervical spine.
24.18 Demonstrate splinting techniques.

25.0 ASSESS AND MANAGE BURN INJURIES--The student will be able to:

25.01 Describe the anatomy, physiology, pathophysiology, and assessment of the integumentary system.
25.02 Discuss the movement of body fluids between plasma, interstitial compartments and intracellular compartments.
25.03 Describe the assessment and management of the burn victim.
25.04 Describe the pathophysiology and treatment of burn shock.
25.05 Describe and discuss the major causes, classifications, and categories of burn.
25.06 Describe and discuss the method of calculating percentages of body surface area burned and various formulas for calculating fluid resuscitation.
25.07 Describe the assessment and management of inhalation injury.
25.08 Demonstrate management of the burn victim with and without associated injuries.

26.0 ASSESS AND MANAGE RESPIRATORY EMERGENCIES--The student will be able to:

26.01 Describe the anatomy and physiology of the respiratory system and define appropriate medical terms.

26.02 Identify the normal partial pressures of oxygen and carbon dioxide in the alveoli, arterial and venous blood, and factors that affect those levels.

26.03 Describe the normal and COPD respiratory drives.

26.04 Identify the pharmacology, actions, indications, precautions, dosages, contraindications, and side effects of typical respiratory drugs for the adult and pediatric patient and demonstrate methods of administration.

26.05 Discuss the signs, symptoms, and pathophysiology of conditions affecting the respiratory system.

26.06 Demonstrate inspection, auscultation and palpation of the thorax.

26.07 Identify normal and abnormal lung sounds.

26.08 Obtain a history and assess patients with respiratory complaints.

26.09 Describe the management of patients with respiratory problems.

27.0 ASSESS AND MANAGE CARDIOVASCULAR EMERGENCIES--The student will be able to:

27.01 Describe the anatomy, physiology, and pathophysiology relevant to cardiovascular disease and emergencies.

27.02 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of common emergency cardiovascular drugs (AHA/ACLS).

27.03 Identify complications of intracardiac injections.

27.04 Describe innervation of the heart, sympathetic and parasympathetic stimulation, blockade, and effects on the heart rate.

27.05 Discuss myocardial electrical physiology.

27.06 Describe signs, symptoms, and common chief complaints of patients with cardiac conditions.

27.07 Identify and describe the historical information, specific observations, and physical findings to be evaluated in the cardiac patient.

27.08 Identify actions, uses, and side effects of common prescription drugs relative to cardiac problems.

27.09 Discuss the etiology of cardiac arrest in adults and pediatric patients.

27.10 Discuss concepts of ECG monitoring, types and causes of artifacts, and rhythm analysis format.

27.11 Identify the wave forms, intervals, and normal values relative to an electrocardiogram (ECG).

27.12 Describe a 12-lead ECG and compare to continuous monitoring.

27.13 Describe the etiology, clinical significance, and ECG characteristics of cardiac dysrhythmias.

27.14 Describe the indications for use of a precordial thump, vago tonic maneuvers, synchronized cardioversion, and defibrillation and discuss energy recommendations for adult and pediatric patients.

27.15 Identify wave forms, artifacts, and dysrhythmias on Lead or MC11 rhythm strips and oscilloscope.

27.16 Obtain history, assess, and manage dysrhythmias or cardiac condtion.

27.17 Demonstrate application of ECG electrodes and obtain a sample Lead II or MC11 rhythm strip.

27.18 Use defibrillator paddles for Lead II monitoring.

27.19 Troubleshoot a poor ECG rhythm.

27.20 Perform a precordial thump, vago tonic maneuvers, synchronized cardioversion, defibrillation, and external cardiac pacing.
27.21 Use a mechanical CPR device.

28.0 ASSESS AND MANAGE ENDOCRINE EMERGENCIES--The student will be able to:

28.01 Identify and describe the anatomy, physiology, pathophysiology of the endocrine system.
28.02 Describe the assessment and management of endocrine emergencies.
28.03 Identify and discuss the significance of the historical information, observations, and physical findings in the patient with endocrine disorders.
28.04 Identify common prescription drugs that a patient with endocrine problems might take and the implications of each.
28.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
28.06 Obtain a history and assess and manage patients with endocrine problems.
28.07 Administer relevant drugs.

29.0 ASSESS AND MANAGE NEUROLOGICAL EMERGENCIES--The student will be able to:

29.01 Identify and describe the anatomy, physiology, pathophysiology of the neurological system.
29.02 Describe the assessment and management of neurological disorders.
29.03 Identify the actions, uses and side effects of common prescription drugs relative to neurological problems.
29.04 Identify common prescription drugs that a patient with neurological problems might take and the implications of each.
29.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
29.06 Describe and use the Glasgow Coma Scale.
29.07 Describe and differentiate various types of seizures and their phases.
29.08 Obtain history and assess patients with neurological disorders.
29.09 Manage patients with neurological emergencies.

30.0 ASSESS AND MANAGE DIGESTIVE, GENITOURINARY, AND REPRODUCTIVE EMERGENCIES--The student will be able to:

30.01 Describe the anatomy, physiology, pathophysiology of the digestive, genitourinary and reproductive systems.
30.02 Identify and describe the significance of the historical information, observations, and physical findings in the patient with digestive, genitourinary, and reproductive disorders.
30.03 Describe the assessment and treatment of digestive, genitourinary, and reproductive system disorders.
30.04 Identify common prescription drugs that a patient with digestive, genitourinary, and reproductive problems might take and the implications of each.

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30.05 Discuss the basic principles, types, and complications of dialysis.
30.06 Discuss the assessment and management of the dialysis patient, to include vascular access.
30.07 Obtain a history and assess patients with digestive, genitourinary, and reproductive problems.
30.08 Manage patients with digestive, genitourinary, and reproductive emergencies.

31.0 ASSESS AND MANAGE ANAPHYLAXIS EMERGENCIES--The student will be able to:

31.01 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of anaphylaxis.
31.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with potential anaphylaxis.
31.03 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects for the adult and pediatric patient for epinephrine, diphenhydramine, aminophylline, and dexamethasone.
31.04 Obtain a history and assess patients with potential anaphylaxis.
31.05 Manage patients with anaphylactic emergencies.
31.06 Administer epinephrine, diphenhydramine, aminophylline, and dexamethasone to the adult and pediatric patient.

32.0 ASSESS AND MANAGE TOXICOLOGICAL, ALCOHOL, AND DRUG ABUSE EMERGENCIES--The student will be able to:

32.01 Discuss toxicologic emergencies.
32.02 Identify and discuss the routes of entry of toxic substances into the body.
32.03 Discuss the role of Poison Control Centers in the EMS system and in the management of patients with toxicological emergencies.
32.04 Define abuse terms, identify commonly abused drugs, and describe their effects.
32.05 Describe the anatomy, physiology, pathophysiology assessment and management of patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.
32.06 Discuss the incidence of alcoholism, drug abuse, and substance abuse in the United States.
32.07 obtain a history, assess, and manage patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.
32.08 Administer relevant drugs.
32.09 Apply a constricting band.

33.0 ASSESS AND MANAGE INFECTIOUS DISEASES--The student will be able to:

33.01 Define terms and conditions relative to infectious diseases.
33.02 Describe the anatomy, physiology, pathophysiology, causes, mode of transmission, incubation period, assessment and management typical infectious and communicable diseases and parasites.

33.03 Identify and discuss the significance of historical information, observations, and physical findings in the patient with infectious/communicable disease or parasites.

33.04 Practice Universal Precautions according to established standards (CDC).

33.05 Discuss procedures for reporting and follow-up after exposure to a communicable disease, according to established standards.

33.06 Describe methods used to disinfect equipment and vehicles involved with an infectious patient.

33.07 Obtain a history and assess patients with infectious/communicable diseases or parasites.

33.08 Manage patients with infectious/communicable disease or parasites.

34.0 ASSESS AND MANAGE ENVIRONMENTAL INJURIES--The student will be able to:

34.01 Describe and discuss homeostasis, methods of body temperature regulation and the role and methods of thermoregulation and heat dissipation and retention in pathologic circumstances.

34.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with hypothermic or hyperthermic disorders.

34.03 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of hypothermic or hyperthermic disorders.

34.04 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of near-drowning.

34.05 Identify and discuss the significance of historical information, observations, and physical findings in the patient with a near-drowning emergency.

34.06 State the factors affecting survivability and probability of successful resuscitation in near-drowning patients.

34.07 Identify the common types and sources of ionizing radiation.

34.08 Identify sources of normal background radiation.

34.09 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of acute and/or chronic exposure to ionizing radiation.

34.10 Identify and discuss the significance of historical information, observations, and physical findings in the patient with acute and/or chronic exposure to ionizing radiation.

34.11 Discuss the safety of allied health personnel and patients related to exposure to ionizing radiation.

34.12 Discuss procedures relating to radiological incidents for notification of appropriate health officials.

34.13 List the common medical problems associated with scuba diving accidents.

34.14 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of decompression sickness, overpressure accidents, pneumomediastinum, air embolism, nitrogen narcosis, and subcutaneous emphysema.

34.15 Identify and discuss the significance of historical information, observations, and physical findings in patients with decompression sickness, overpressure accidents, pneumomediastimum, air embolism, nitrogen narcosis, and subcutaneous emphysema, and the significance of each.

34.16 Obtain a history and assess patients with hypothermic and hyperthermic problems.

34.17 Discuss management of patients with hypothermic and hyperthermic complaints.

34.18 Obtain a history and assess patients with exposure to ionizing radiation.

34.19 Discuss management of patients with exposure to ionizing radiation.

34.20 Obtain a history and assess patients with near-drowning emergencies.

34.21 Discuss management of patients with near-drowning emergencies.

34.22 Obtain a history and assess patients with scuba diving emergencies.

34.23 Discuss management of patients with scuba diving emergencies.

35.0 ASSESS AND MANAGE GERIATRIC EMERGENCIES--The student will be able to:

35.01 Identify the physical, social and psychological differences between youth and the elderly.

35.02 Identify and discuss the significance of historical information, observations, and physical findings in the geriatric patient with acute and/or chronic medical problems.

35.03 Identify and discuss illness/complaints that require special consideration in the elderly.

35.04 Describe the anatomy, physiology, pathophysiology, assessment and management of common geriatric illnesses.

35.05 Obtain a history and assess geriatric patients.

35.06 Treat geriatric patients.

35.07 Discuss geriatric abuse.

35.08 Discuss the components and objectives of a gerontology program.

36.0 ASSESS AND MANAGE PEDIATRIC EMERGENCIES--The student will be able to:

36.01 Identify the general goals of management of the pediatric patient.

36.02 Discuss specific historical information and its sources in evaluating the pediatric patient.

36.03 Discuss by age groups the relevant aspects of normal growth and development, personality development, relatiohship to parents, history factors, common illnesses and accidents.

36.04 Describe Sudden Infant Death Syndrome (SIDS), current theories, assessment and management, and the immediate needs of the family.

36.05 Describe the characteristics of the child abuser and the abused child.

36.06 Discuss the assessment and management of the potentially abused child including important historical information and management of the family in the child abuse situation.

36.07 Describe the anatomy, physiology, pathophysiology, assessment, and management of common pediatric disorders.

36.08 Identify the pediatric dosage for relevant drugs (AHA/ACLS).
36.09 Discuss and demonstrate techniques for airway maintenance in the pediatric patient.
36.10 Describe and discuss techniques and sites for intravenous infusion in the pediatric patient.
36.11 Obtain history and assess the pediatric patient.

37.0 ASSESS AND MANAGE THE GYNECOLOGIC PATIENT--The student will be able to:

37.01 Describe the anatomy and physiology of the female reproductive system.
37.02 Identify and discuss the significance of historical information, observations, and physical findings to be evaluated in the patient's gynecologic problems.
37.03 Describe the pathophysiology and management of gynecological disorders.
37.04 Describe potential causes, assessment and management of trauma to the external genitalia.
37.05 Describe the assessment and management of a sexual assault victim.
37.06 Obtain a history and assess and manage the patient with a gynecologic problem.

38.0 ASSESS AND MANAGE THE OBSTETRIC PATIENT--The student will be able to:

38.01 Define obstetrical terminology.
38.02 Describe the process of fetal development and circulation.
38.03 Identify and discuss the significance of historical information, observations, and physical findings in the obstetric patient.
38.04 Identify and describe early signs and symptoms of pregnancy.
38.05 Describe potential causes, assessment, and management of trauma to the pregnant mother and the fetus.
38.06 Discuss the effects of pregnancy on pre-existing medical conditions.
38.07 Describe the anatomy, physiology, pathophysiology, causes, assessment and management of obstetric.
38.08 Describe Braxton-Hicks contractions.
38.09 Discuss the progression of labor.
38.10 Discuss factors that influence transport decisions for the patient in labor.
38.11 Describe a normal cephalic delivery.
38.12 Discuss the pathophysiology, assessment, and management of delivery complications.
38.13 Identify the pharmacology, actions, indications, methods of administration, dosages, contraindications and side effects of oxytocin.
38.14 Obtain a history and assess the obstetric patient.
38.15 Treat obstetrical patients, including assisting with childbirth.
38.16 Administer oxytocin.

39.0 ASSESS AND MANAGE THE NEONATE--The student will be able to:

39.01 Describe anatomy, physiology, pathophysiology, assessment, and routine management of the neonate.

39.02 Describe the mechanisms and effects, and treatment of hypothermia in the neonate.
39.03 Define the parameters, numerical values utilized, and the procedure for Apgar scoring.
39.04 Describe and demonstrate stimulation of and CPR for the distressed neonate.
39.05 Identify observations and physical findings to be evaluated in the neonate.
39.06 Identify the problems and equipment requirements for transportation of the neonate.
39.07 Obtain a history, assess, and manage the neonate.
39.08 Administer oxygen to the neonate.
39.09 Suction the neonate using DeLee Suction and bulb syringe.
39.10 Calculate Apgar score.

40.0 ASSESS AND MANAGE BEHAVIORAL EMERGENCIES--The student will be able to:

40.01 Define behavioral emergency.
40.02 Discuss factors that may alter the emotional status of the ill or injured.
40.03 Discuss reasons and method of reassuring the patient experiencing and emotional crisis.
40.04 Discuss verbal communication techniques usful in managing the emotionally disturbed patient.
40.05 Discuss means to insure the safety of the Paramedic.
40.06 Discuss circumstances when bystanders and relatives should be removed from the scene.
40.07 Discuss factors which increase the risk of suicide and behaviors that are indicators of an impending suicide attempt.
40.08 Discuss the techniques that facilitate the systematic gathering and reporting of information about the disturbed patient.
40.09 Discuss techniques that are useful in managing the effects of crisis situations on the Paramedic.
40.10 Discuss techniques that are useful in redirecting anxiety in relatives and bystanders.
40.11 Discuss appropriate action of the Paramedic when confronted with an uncontrollable, armed patient.
40.12 Discuss those situations in which the EMT-Paramedic may forcibly restrain or transport a patient.
40.13 Discuss and demonstrate techniques for restraining the violent patient.
40.14 Discuss and demonstrate techniques useful in protecting the EMT-Paramedic when attacked by a violent patient.
40.15 Obtain a history, assess, and manage patients with behavioral emergencies.

MANAGEMENT OPTION: This option (OUTCOMES 41-51) prepares students for administrative and supervisory postions in the emergency Medical Services field.

41.0 DEMONSTRATE LEADERSHIP AND ADMINISTRATIVE SKILLS BASIC TO MANAGEMENT EMERGENCY MEDICAL SERVICE SYSTEMS--The student will be able to:

41.01 Describe an emergency medical service system, its scope, national, state and local involvement, and the organizational climate that serves as the setting and framework for managing an emergency medical service system.

41.02 Identify current trends and perspectives related to the management of health care organizations in general, and emergency medical service systems in particular, and the means by which the application of sound management principles and behavior can facilitate change.

41.03 Interpret managerial principles, practices and processes and relate them to emergency medical service systems.

41.04 Identify the role, responsibilities and parameters for the various levels of management within emergency medical service systems.

41.05 State the control processes and techniques used to ensure that the objectives, strategies, and policies of the emergency medical service system are achieved effectively and efficiently.

41.06 Relate the various aspects of organizational dynamics (decision making, motivations, leadership, and communication) to the needs and problems of emergency medical service systems.

41.07 Relate personnel administration practices to the total scope of labor relations, including manpower acquisition, maintenance, and utilization.

42.0 INTERPRET FEDERAL, STATE AND LOCAL LAWS AS THEY APPLY TO EMERGENCY MEDICAL SERVICE SYSTEMS--The student will be able to:

42.01 List and discuss federal, state and local laws, administrative rules, requirements and recommendations relating to emergency medical service systems.

42.02 List required standards and procedures for facility and staff.

42.03 Identify mandatory requirements regarding environmental health and safety standards.

42.04 Discuss the impact of legislative changes on emergency medical service systems.

43.0 DEMONSTRATE KNOWLEDGE OF OPERATIONAL AND ORGANIZATIONAL STRUCTURES OF EMERGENCY MEDICAL SERVICE SYSTEMS--The student will be able to:

43.01 Describe the functions and standards of departments in emergency medical service systems.

43.02 Constrast administrative roles and responsibilities in different types of emergency medical service systems.

43.03 Describe principles and philosophies of emergency medical service systems.

43.04 Identify several basic principles of emergency medical care.

43.05 Describe communication techniques within health care systems.

43.06 Utilize state of the art language and terminology when communicating within the emergency medical service system.

44.0 DEMONSTRATE KNOWLEDGE OF PSYCHOLOGICAL PROBLEMS AND STRESSORS IN EMERGENCY MEDICAL SERVICE EMPLOYEES AND FIND APPROPRIATE SOLUTIONS--The student will be able to:

44.01 Demonstrate knowledge of the worth and dignity of each employee.

44.02 Accommodate individual differences, characteristics, and behaviors.
44.03 Adjust employee schedules, personnel assignments, etc. to provide optimum performance.

45.0 DEMONSTRATE KNOWLEDGE OF MATERIALS AND SUPPLIES USED IN EMERGENCY MEDICAL SERVICE SYSTEMS--The student will be able to:

45.01 Evaluate current inventory.
45.02 Prepare purchase orders with knowledge of current financial status and budgetary constraints.
45.03 Demonstrate knowledge of optimum quality, price, and quantity.

46.0 DEMONSTRATE KNOWLEDGE OF OCCUPATIONAL SAFETY AND HEALTH--The student will be able to:

46.01 Prepare a plan for employee safety in the event of emergency situations involving business or office facilities.
46.02 Identify hazardous materials and substances in the workplace.
46.03 Identify appropriate storage facilities for all substances.
46.04 Conduct inservice for employees.
46.05 Respond to employee inquiries and post notices as needed.

47.0 DEMONSTRATE KNOWLEDGE OF APPROPRIATE WORKLOADS FOR EACH EMPLOYEE--The student will be able to:

47.01 Prepare job descriptions.
47.02 Prepare job advertisements and notices.
47.03 Compute man-hours required for each job position within the emergency medical service system.
47.04 Identify factors that alter the workload and man-hours computed for each position.

48.0 REVIEW, APPROVE AND MONITOR DEPARTMENTAL CAPITAL AND OPERATIONAL BUDGETS--The student will be able to:

48.01 Develop capital budget justification format.
48.02 Delegate capital budget preparation to key managers.
48.03 Analyze and approve appropriate capital budget items.
48.04 Develop an operational budget format.
48.05 Analyze and approve appropriate financial levels in each operational budget.

49.0 IDENTIFY AND APPLY LEGAL REIMBURSEMENT SYSTEMS--The student will be able to:

49.01 Establish an item charge system that meets reimbursement system requirements.
49.02 Establish a mechanism for utilization review and quality assurance.
49.03 Develop an accounts receivable system which monitors and optimizes reimbursement.

50.0 COMPLY WITH ACCREDITATION STANDARDS OF GOVERNMENTAL OR GOVERNMENTAL-APPOINTED AGENCIES AND ORGANIZATIONS--The student will be able to:

50.01 Describe and discuss procedures to meet required standards for emergency medical service systems.
50.02 Identify the required standards for health care personnel in general and emergency medical service personnel in particular.
50.03 Develop policies and operational procedures to meet required standards.
50.04 Establish liaison mechanisms with appropriate accrediting organizations.

51.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

51.01 Describe and demonstrate function and operation of basic computer systems.
51.02 Describe and demonstrate various types of computer systems and their specific applications.
51.03 Describe and demonstrate general applications such as word processing, database management, spreadsheets, and communications.
51.04 Describe and discuss special applications such as computer-aided dispatch (CAD), quality assurance, and inventory control.

EDUCATION OPTION: This option (OUTCOMES 52-57) prepares students as trainers and/or instructors in the EMS field.

52.0 DEMONSTRATE KNOWLEDGE OF BASIC TEACHING METHODS, LEARNING AND EDUCATIONAL PSYCHOLOGY--The student will be able to:

52.01 Describe and demonstrate various methods of student learning.
52.02 Describe and demonstrate various methods of teaching as they apply to student learning techniques.
52.03 Describe and demonstrate competency-based education (CBE).
52.04 Describe and demonstrate short-term and long-term memory and the implications of each on the student learning process.
52.05 Describe and demonstrate various educational psychologies.

53.0 DESCRIBE AND DISCUSS CURRICULUM DESIGN AND DEVELOPMENT--The student will be able to:

53.01 Develop and discuss needs assessments.
53.02 Develop a task analysis.
53.03 Develop student behavioral objectives.
53.04 Design and develop competency-based curriculum.
53.05 Integrate curriculum with current occupational responsibilities.
53.06 Perform on-going curriculum review and development.

54.0 DEMONSTRATE APPROPRIATE MEASUREMENT AND EVALUATION SKILLS--The student will be able to:

54.01 Construct appropriate objective tests commensurate with curriculum.
54.02 Develop effecitve measurement instruments for student performance in clinical settings.
54.03 Develop effective evaluation tools for evaluating student performance.

54.04 Record, monitor, and provide feedback to student regarding student progress.

55.0 DEMONSTRATE MASTERY OF REQUIRED TECHNICAL SKILLS--The student will be able to:

55.01 Demonstrate performance of basic life support instructor skills.
55.02 Demonstrate performance of advanced life support instructor skills.
55.03 Demonstrate performance of trauma life support instructor skills.
55.04 Demonstrate performance of other medical skills appropriate to the emergency medical serivces curriculum.

56.0 DEMONSTRATE CLASSROOM MANAGEMENT SKILLS--The student will be able to:

56.01 Demonstrate and apply effective leadership skills.
56.02 Demonstrate and apply effective motivational skills.
56.03 Demonstrate and apply effective organizational skills.
56.04 Demonstrate and apply effective disciplinary skill.

57.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

57.01 Describe and discuss various types of computer systems and their specific applications as they relate to Emergency Medical Services.
57.02 Describe and discuss applications such as word processing, database management, spreadsheets, communications, and computer-aided instruction (CAI) as they relate to Emergency Medical Services.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Emergency Medical Technician
Occupational Area: Health Science Education

PSVC

CIP Number 0317.020500
Grade Level College Credits
Length Certificate/200 clock hours

I. **MAJOR CONCEPTS/CONTENT**: This is an instructional program that prepares students for employment as emergency medical technicians (32508216) to function at the basic pre-hospital emergency medical technician level and treat various medical/trauma conditions using appropriate equipment and materials. The program prepares students for certification as EMT's in accordance with Chapter 10D-66 of the Florida Administrative Code. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services and the curriculum must adhere to the U.S. Department of Transportation (DOT) Emergency Medical Technician-Ambulance National Standards Curriculum. This is the initial level for a career in emergency medical services and the primary prerequisite for paramedic training and certification.

The content includes, but is not limited to, patient assessment, airway management, cardiac arrest, external and internal bleeding and shock, traumatic injuries, fractures, dislocations, sprains, poisoning, heart attack, stroke, diabetes, acute abdomen, communicable diseases, patients with abnormal behavior, alcohol and drug abuse, the unconscious state, emergency childbirth, burns, environmental hazards, communications, reporting, extrication and transportation of patient. The student must be proficient in patient assessment and evaluation, the use of suctioning devices, oral and nasal airways, resuscitation devices, oxygen equipment, sphygmomanometer and stethescope, splints of all types, pneumatic antishock garments, extrication tools, dressings and bandages, stretchers and patient carrying devices. The Health Careers Core must be taken by all students (secondary, postsecondary adult, and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor. The recommended instructor-student ratio should not exceed 1:8. The Human Patient Simulator (HPS) may be used to fulfill or enhance some clinical hours with prior approval of governing boards and/or accrediting agencies.

Clinical Activities: Hospital activity shall include a minimum of 16 hours of supervised experience in the hospital emergency department. Clinical activity shall include appropriate patient assessment skills, intervention and documentation relevent to each clinical rotation.

Field Internship Activities: Field internship shall include a competency based program to assure appropriate pre-hospital assessment and management of medical and trauma patients, as well as associated manual skills. The field internship activity shall include a minimum of 5 emergency runs resulting in patient care appropriate for the EMT. In addition, the patient care components should include minimum competencies in patient assessment, airway management and ventilation, trauma and medical emergencies.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc. is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

An EMT program must be taught by a Florida certified EMT or paramedic with two years experience, meeting the qualifications as set forth in 10D 66.0586(4)(f) FAC.

An American Heart Association or Red Cross certification in "professional" BLS is required of all candidates for entrance into an EMT program. A student physical requirement must be met in accordance with HRS guidelines. A student must demonstrate a basic vocational/college-level preparation competency in english, mathematics and reading on either a standardized entrance examination or through appropriate remedial education/instruction.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program/cluster and is printed in a supplement to this document.

The typical length of this program for the average achieving student is 200 hours with a college credit certificate. This includes the Health Careers Core (Approximately 90 clock hours).

The Student Performance Standards for Emergency Medical Technology-EMT were adapted and condensed from the U.S. Department of Transportation 1994 Emergency Medical Technician-Ambulance National Standard Curriculum Instructor's Lesson Plans. Administrators and instructors should refer to these materials for additional detail.

When the word demonstrate is used in a standard, it shall require the actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

EMERGENCY MEDICAL TECHNICIAN (12-26)

12.0 Demonstrate knowledge of the EMT care system.
13.0 Describe maintenance of EMT well-being.
14.0 Describe medical/legal/ethical issues specific to EMT.
15.0 Take baseline vital signs and sample history.
16.0 Lift and move patients
17.0 Accomplish basic and advanced airway management.

18.0 Evaluate the scene of a trauma or medical emergency.
19.0 Demonstrate initial and ongoing assessments.
20.0 Perform focused and detailed history and physical exams.
21.0 Demonstrate ability to communicate as an EMT.
22.0 Assist patients to administer medications.
23.0 Respond correctly to various medical/behavioral/OB/GYN emergencies.
24.0 Manage various trauma situations.
25.0 Manage emergency situations involving infants/children.
26.0 Demonstrate knowledge of the emergency service operation.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Emergency Medical Techncian
Secondary Number:
Postsecondary Number: 0317.020500

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of health care occupations.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights".
- 03.04 Describe a Code of Ethics consistent with the health care industry.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.

06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

EMERGENCY MEDICAL TECHNICIAN: Intended outcomes 12-26 complete the occupational exit of EMT. The outcomes may be taught as one or more modules at the postsecondary level.

12.0 DEMONSTRATE KNOWLEDGE OF THE EMT CARE SYSTEM--The student will be able to:

12.01 Define Emergency Medical Services (EMS) systems.
12.02 Differentiate the roles and responsibilities of the EMT from other prehospital care providers.
12.03 Describe the roles and responsibilities related to safety, quality improvement, and medical direction and the EMT's role in the process.
12.04 State the specific Florida statutes and regulations regarding the EMS system.
12.05 Assess areas of personal attitude and conduct of the EMT.
12.06 Characterize the various methods used to assess the EMS system.

13.0 DESCRIBE MAINTENANCE OF EMT WELL-BEING--The student will be able to:

13.01 List possible emotional reactions that the EMT, the EMT's family, and the patient's family may experience when faced with trauma, illness, death or dying of an adult, child, or infant.
13.02 State the steps in the EMT's approach to the family confronted with death or dying of an adult, child, or infant.
13.03 Recognize the signs and symptoms of critical incident stress and state ways of alleviating the stress.

13.04 Explain the need to determine scene safety, including the importance of body substance isolation (BSI), and the steps the EMT should take for personal protection from airborne and bloodborne pathogens.

13.05 List the personal protective equipment necessary for various situations.

13.06 Use, remove and discard protective garments and complete disinfecting, cleaning and reporting documentation in all potential infectious exposure situations or simulated scenarios.

13.07 Demonstrate knowledge of the medical-legal aspects of significant exposure cases for the patient and the EMT.

14.0 DESCRIBE MEDICAL/LEGAL/ETHICAL ISSUES SPECIFIC TO EMT--The student will be able to:

14.01 Define the EMT scope of practice.

14.02 Discuss the importance of and the rationale for DNR advance directives and local and state provisions regarding EMS application.

14.03 Explain the rationale for the concept of varying degrees of DNR.

14.04 Define consent (implied and expressed) and discuss methods of obtaining consent

14.05 Discuss the implications for the EMT in patient refusal of transport, and in abandonment, negligence, and battery.

14.06 Discuss the considerations of the EMT in organ retrieval.

14.07 State the conditions that require an EMT to notify local law enforcement officials and differentiate the actions that need to be taken to assist in the preservation of a crime scene.

15.0 TAKE BASELINE VITAL SIGNS AND SAMPLE HISTORY--The student will be able to:

15.01 Assess vital signs, differentiating normal from abnormal.

15.02 Assess skin color ,temperature, state of dryness or moistness, and capillary refill

15.03 Assess pupils, including size, reactive and non-reactive, and equal and unequal.

15.04 Explain the difference between auscultation and palpation for obtaining a blood pressure.

15.05 Identify the components and the importance of the SAMPLE history.

15.06 Differentiate between a sign and a symptom.

15.07 Demonstrate the skills used to obtain information from the patient, family, or bystanders at the scene.

15.08 Discuss the need to search for additional medical identification.

16.0 LIFT AND MOVE PATIENTS--The student will be able to:

16.01 Describe the guidelines and safety precautions for moving or carrying patients and/or equipment specific to EMT.
16.02 State three situations that may require the use of an emergency move.
16.03 Identify, prepare for use, and demonstrate use of the following patient carrying devices - wheeled ambulance stretcher, stair chair, scoop stretcher, long spine board, basket stretcher, and flexible stretcher.

17.0 ACCOMPLISH BASIC AND ADVANCED AIRWAY MANAGEMENT--The student will be able to:

17.01 Describe the anatomy and physiology of the respiratory and airway system differentiating adult and infant,child.
17.02 Differentiate between the signs of adequate and inadequate ventilation.
17.03 Describe and demonstrate the steps in providing mouth-to-mouth artificial ventilation with body substance isolation (barriers) for adult, infant and child patients.
17.04 Demonstrate a knowledge of the parts and assembly of a bag-valve-masksystem.
17.05 Demonstrate ventilation of a patient with a bag-valve-mask system, including adult, infant and child.
17.06 Demonstrate ventilation of a patient with a pocket mask.
17.07 Demonstrate artificial ventilation of a patient utilizing a flow restricted, oxygen-powered ventilation device.
17.08 Demonstrate artificial ventilation of a patient with a stoma.
17.09 Demonstrate measurement and insertion of oropharyngeal and nasopharyngeal airways.
17.10 Demonstrate oxygen administration for adult, infant, and child patients, including correct use of oxygen tanks and regulators, and correct flow rate.
17.11 Demonstrate the use of a non-rebreather face mask, stating the correct flow rate and indications for its use.
17.12 Demonstrate the use of a nasal cannula for oxygen administration, stating the correct flow requirements and indications for its use.
17.13 Explain the pathophysiology of airway compromise.
17.14 **(OPTIONAL)** Describe and demonstrate the indications, contraindications and technique for insertion of nasal gastric tubes in the adult and pediatric patient.
17.15 **(OPTIONAL)** Demonstrate how to perform the Sellick maneuver (cricoid pressure).
17.16 **(OPTIONAL)** Demonstrate orotracheal intubation in adult, infant, and child patients, utilizing curved blade, straight blade, and stylets.
17.17 **(OPTIONAL)** Demonstrate endotracheal intubation, placement confirmation, and securement in the adult, infant, and child patient.
17.18 Demonstrate the placement of a multi-lumen airway, tube confirmation, and securement in the adult patient.

17.19 Demonstrate foreign body airway obstruction removal in the adult, infant and child patient.

18.0 EVALUATE THE SCENE OF A TRAUMA OR MEDICAL EMERGENCY--The patient will be able to:

18.01 Recognize and describe hazards/potential hazards.
18.02 Discuss common mechanisms of injury/nature of illness.
18.03 Identify the total number of patients at the scene and the need for additional help or assistance.
18.04 Evaluate scene safety prior to entry.

19.0 DEMONSTRATE INITIAL AND ONGOING ASSESSMENTS--The student will be able:

19.01 Summarize reasons for forming a general impression of the patient.
19.02 Describe and demonstrate the components of an initial assessment, including vital signs, skin condition, mental status, airway and breathing and external bleeding.
19.03 Demonstrate the ability to prioritize patients.
19.04 Discuss the reasons for repeating the initial assessment as part of the ongoing assessment.
19.05 Describe the components and demonstrate the skills of the on-going assessment.
19.06 Describe trending of assessment components.

20.0 PERFORM FOCUSED AND DETAILED HISTORY AND PHYSICAL EXAMS--The student will be able to:

20.01 Discuss the reasons for and the areas included in the focused rapid trauma assessment and discuss what should be evaluated.
20.02 Differentiate when the rapid assessment may be altered in order to provide patient care.
20.03 Demonstrate the rapid trauma assessment that should be used to assess a patient based on mechanism of injury.
20.04 Differentiate between and demonstrate the focused history and physical exam that is performed for responsive medical patients with no known prior history and responsive patients with a known prior history.
20.05 Discuss the components of and areas of the body included in a detailed physical exam.
20.06 Explain what additional care should be provided while performing the detailed physical exam.
20.07 Distinguish between the detailed physical exam that is performed on a trauma patient and that of a medical patient.
20.08 Demonstrate the skills involved in performing a detailed physical examination.
20.09 Demonstrate the skills involved with the proper maintenance of an intraveneous line, evaluation of patency, securement, and fluid flow rate appropriate for the indicated patient.

21.0 DEMONSTRATE ABILITY TO COMMUNICATE AS AN EMT--The student will be able to:

21.01 List the proper methods of initiating and terminating a radio call.
21.02 State the proper sequence for delivery of patient information.
21.03 Identify the essential components of the EMT verbal report, stating the legal aspects to be considered.
21.04 List the correct radio procedures in the following phases of a typical call; to the scene, at the scene, to the facility, at the facility, to the station, at the station.
21.05 Perform a simulated, organized concise radio transmission, an organized, concise report that would be given to an ALS provider arriving at an incident scene at which the EMT was already providing care, and a patient report that would be given to the staff at a receiving facility.
21.06 Correctly complete a pre-hospital report.
21.07 Describe the legal implications associated with the written report and the special consideration concerning patient refusal.
21.08 Discuss all state and local record and reporting requirements specific to EMS.
21.09 Explain the rationale for using an accurate and synchronous clock so that information can be used in trending.

22.0 ASSIST PATIENTS TO ADMINISTER MEDICATIONS--The student will be able to:

22.01 Identify medications carried on the unit by brand and generic names.
22.02 Identify medications which the EMT may assist patients to administer by brand and generic names.
22.03 Discuss the various forms of medication and the rationale for their administration
22.04 Demonstrate general steps for assisting patient with self-administration of medications.
22.05 Correctly read labels and inspect each type of medication.

23.0 RESPOND CORRECTLY TO VARIOUS MEDICAL/BEHAVIORAL/OB/GYN EMERGENCIES--The student will be able to:

23.01 Describe and discuss the anatomy and physiology of the various body systems
23.02 Complete pre-hospital reports for patients with medical emergencies.
23.03 State the generic name, medication forms, dose administration, action, indications, contraindications

and side effects of medications used for medical emergencies.

23.04 Evaluate the need for medical direction in medical emergencies.

23.05 Establish the relationship between the medical emergency condition and airway management.

23.06 Respond correctly to medical respiratory emergencies.

  23.06.01 Demonstrate the emergency medical care for breathing difficulty in adult, infant, and child patients.

  23.06.02 Differentiate between upper airway obstruction and lower airway disease in the infant and child patient.

  23.06.03 Demonstrate the steps in facilitating the use of an inhaler.

23.07 Respond correctly to medical cardiac emergencies.

  23.07.01 Define the role of the EMT in the emergency cardiac care system.

  23.07.02 Recognize the importance of prehospital ACLS intervention, if available, and the importance of urgent transport to a facility with ACLS if it is not available in the pre-hospital setting.

  23.07.03 Demonstrate the assessment and emergency care of a patient experiencing chest pain/discomfort, including correct positioning.

  23.07.04 List the indications and the contraindications for automated external defibrillation(AED) and the impact of age and weight on defibrillation.

  23.07.05 Demonstrate the application and operation of and assessment and documentation of the patient to the automated external defibrillator.

  23.07.06 Demonstrate a knowledge of the types, their advantages and disadvantages, and the maintenance of automated external defibrillators.

  23.07.07 Demonstrate the skills necessary to complete the automated defibrillator operator's checklist.

  23.07.08 Assist a patient with self administration of nitroglycerin and assess and document the patient's response to it.

23.08 Respond correctly to diabetes with altered mental status emergencies.

  23.08.01 Identify the patient with altered mental status who is taking diabetic medication and the implications of a diabetes history.

  23.08.02 Administer oral glucose and assess and document the patient's response to it.

  23.08.03 Recognize the patient experiencing an allergic reaction.

  - 23.08.04 Demonstrate the emergency medical care of the patient experiencing an allergic reaction, differentiating between general allergic reactions and those requiring immediate medical care, including immediate use of the epinephrine autoinjector.
  - 23.08.05 Demonstrate the use of epinephrine auto-injector, including the assessment and documentation of the patient's response to it.
  - 23.08.06 Demonstrate proper disposal of equipment.
- 23.09 Respond correctly to allergy emergencies.
- 23.10 Respond correctly to poisoning and overdose emergencies.
  - 23.10.01 List various ways that poisons enter the body and signs and symptoms associated with poisoning.
  - 23.10.02 Demonstrate the steps in the emergency medical care of the patient with suspected poisoning and for those with possible overdose.
  - 23.10.03 Perform the necessary steps to provide a patient with activated charcoal.
  - 23.10.04 Demonstrate proper disposal of equipment for the administration of activated charcoal.
- 23.11 Respond correctly to environmental emergencies.
  - 23.11.01 Identify patients suffering from environmental emergencies, including heat exposure, cold exposure, water-related emergencies, and bites and stings.
  - 23.11.02 Describe the complications of near drowning.
  - 23.11.03 Demonstrate the assessment and emergency medical care of patients with exposure to cold, exposure to heat, near drowning, and bites and stings.
- 23.12 Respond correctly to behavioral emergencies.
  - 23.12.01 Define behavioral emergencies and discuss the general factors that may cause an alteration in patients' behavior.
  - 23.12.02 State the various reasons for psychological crisis.
  - 23.12.03 Discuss the characteristics of a patients' behavior which suggest he is at risk for suicide or violence.
  - 23.12.04 Demonstrate the assessment and emergency medical care of the patient experiencing behavioral emergency.
  - 23.12.05 Demonstrate various techniques to calm and/or restrain a patient with a behavioral problem.
- 23.13 Respond correctly to obstetrical and gynecological emergencies.
  - 23.13.01 Identify and explain the use of an obstetrics kit.
  - 23.13.02 Identify pre-delivery emergencies.
  - 23.13.03 Demonstrate the steps to assist in pre-delivery and in the normal cephalic delivery, and in the delivery of the placenta.

- 23.13.04 Demonstrate necessary care procedures of the fetus as the head appears and of other neonatal procedures, including post-delivery care.
- 23.13.05 Demonstrate how and when to cut the umbilical cord.
- 23.13.06 Demonstrate the routine post delivery care and the emergency care of the mother with excessive bleeding.
- 23.13.07 Demonstrate the procedures for the following abnormal deliveries: vaginal bleeding, breech birth, prolapsed cord, limb presentation.

24.0 MANAGE VARIOUS TRAUMA SITUATIONS--The student will be able to:

- 24.01 Establish the relationship between airway management and the trauma patient.
- 24.02 Establish the relationship between body substance isolation and various trauma situations.
- 24.03 Demonstrate completing a prehospital report for various trauma situations.
- 24.04 Respond correctly to bleeding and shock.
  - 24.04.01 Differentiate between arterial, venous, and capillary bleeding.
  - 24.04.02 Demonstrate the use of direct pressure, diffuse pressure, pressure points, and tourniquets in controlling external bleeding.
  - 24.04.03 Demonstrate the care of the patient exhibiting signs and symptoms of internal bleeding.
  - 24.04.04 Demonstrate the care of the patient exhibiting signs and symptoms of shock (hypoperfusion), including adult, infant, and child.
- 24.05 Respond correctly to soft tissue injuries.
  - 24.05.01 Identify types of closed and open soft tissue injuries.
  - 24.05.02 Demonstrate the steps in the care of closed soft tissue injuries and open soft tissue injuries.
  - 24.05.03 Demonstrate the steps in the emergency medical care of a patient with an open chest wound.
  - 24.05.04 Demonstrate the steps in the emergency medical care of a patient with an open abdominal wound.
  - 24.05.05 Demonstrate the steps in the emergency medical care of a patient with an impaled object.
  - 24.05.06 Demonstrate the steps in the emergency medical care of a patient with an amputation or an amputated part.
  - 24.05.07 Demonstrate the steps in the emergency medical care of a patient with superficial, partial thickness, full thickness, and chemical burns.
- 24.06 Respond correctly to musculoskeletal trauma situations.
  - 24.06.01 Differentiate between an open and a closed painful, swollen, deformed extremity

24.06.02 State the reasons for, the general rules and the complications of splinting.
24.06.03 Demonstrate the emergency medical care of a patient with a painful, swollen, deformed extremity.

24.07 Respond correctly to injuries to the head and spine.
24.07.01 Identify potential spine and head injuries.
24.07.02 Demonstrate opening the airway in a patient with a suspected spinal cord injury.
24.07.03 Demonstrate evaluating a responsive patient with a suspected spinal cord injury.
24.07.04 Demonstrate stabilization of the cervical spine.
24.07.05 Demonstrate the two person and the four person log roll for a patient with a suspected spinal cord injury.
24.07.06 Demonstrate securing a patient to a long spine board and the use of the short board immobilization technique.
24.07.07 Demonstrate procedure for rapid extrication.
24.07.08 Demonstrate preferred and alternative methods of stabilization of a helmet and helmet removal techniques.

25.0 MANAGE EMERGENCY SITUATIONS INVOLVING INFANTS/CHILDREN--The student will be able to:

25.01 Identify the developmental considerations for the following age groups: infants, toddlers, pre-school, school age, adolescent.
25.02 Describe differences in anatomy and physiology of the infant, child and adult patient.
25.03 Differentiate the response of the ill or injured infant or child (age specific) from that of an adult.
25.04 Indicate various causes of respiratory emergencies in the infant, child patient and differentiate between respiratory distress and respiratory failure.
25.05 Describe the methods of determining end organ perfusion in the infant and child patient.
25.06 State the usual cause of cardiac arrest in infants and children versus adults.
25.07 List the common causes and describe the management of seizures in the infant and child patient.
25.08 List the possible causes of sudden infant death syndrome (SIDS) and the EMT's role and relationship with family members.
25.09 Differentiate between the injury patterns in adults, infants, and children and discuss the field management of the infant and child trauma patient.
25.10 Summarize the indicators and the medical legal responsibilities in suspected child abuse.
25.11 Deal with the feelings of infant and child patients, the patient's family, and the EMT.

26.0 DEMONSTRATE KNOWLEDGE OF THE EMERGENCY SERVICE OPERATION--The student will be able to:

26.01 List the phases of an ambulance call, discuss the medical and non-medical equipment needed to respond to a call, and identify what is essential for completion of a call.
26.02 Describe the general provisions of state laws relating to the operation of the ambulance and privileges in any or all of the following categories: speed warning lights, sirens, right-of-way, parking, turning, contributing factors to unsafe driving.
26.03 Describe the considerations that should be given to request for escorts, following an escort, and vehicle intersections and discuss "Due Regard For Safety of All Others".
26.04 State the information essential in order to respond to a call and discuss various situations that may affect response to a call.
26.05 Distinguish among the terms cleaning, disinfection, high-level disinfection, and sterilization and describe how to clean or disinfect items following patient care.
26.06 Prepare a unit to respond after use.
26.07 Define and discuss the fundamental components of extrication, its purpose, the role and protective equipment of the EMT, and the steps necessary to protect the patient
26.08 Distinguish between simple and complex access and evaluate various methods of gaining access.
26.09 Explain the EMT's role during a call involving hazardous materials or a hazard at the scene.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Funeral Services
Occupational Area:	Health Science
	PSV
CIP Number	0312.030100
Grade Level	College Credits
Length	AS Degree/72 credit hours
Certification	

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as embalmers (39014268), funeral attendants (68041496), or funeral directors and morticians (39011010) or to provide supplemental training for persons previously or currently employed in these occupations. The program must be approved by the Florida Board of Funeral Directors and Embalmers so that the graduate may take the state licensing examination to practice as a licensed embalmer or funeral director, according to Chapter 470.006 FS.

The content includes, but is not limited to, techniques of embalming and restorative art, mortuary administration, funeral law, public health and sanitation, human anatomy and physiology, microbiology, pathology, mortuary social science, stress management, employability skills, leadership and human relations skills, and health and safety, including CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The intended outcomes are the same as the adopted curricular objectives of the American Board of Funeral Service Education which must be endorsed by accredited programs as curricular standards.

II. **LABORATORY ACTIVITIES**: The embalming, cosmetology and restorative art laboratories provide practical experience in the techniques of restorative art and cosmetology. The pathology lab provides the students with experience in identifying pathological destruction of body elements. A practicum experience in embalming and funeral directing, funeral home operations and management in the funeral home setting is provided.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Health Occupations Students of America (HOSA), Inc., is an appropriate vocational student organization for providing leadership training experiences and for reinforcing specific vocational skills. When provided, these activities are considered an integral part of this instructional program.

Upon completion of the associate in science in funeral service, graduates are qualified to write the National Funeral Service Board Examination. The program must be approved by the DBPR Board of Funeral Directors and Embalmers; also in accordance with the accrediting standards of: American Board of Funeral Services Education, Inc., 14 Crestwood Road, Cumberland, Maine 04021 (207/829-5715) 470.006 F.S. 1(d); 61G8-15.002(1) F.A.C.

One year of internship is required in the State of Florida for the embalmer or the funeral director license. These internships may be served concurrently. Upon completion of the internship, students are eligible to write the Florida state examination for the embalmer and funeral director license.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program and is printed in a supplement to this document.

The standard credit hour length for this program is 72 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

01.0 Satisfactorily perform the basic techniques of embalming, restorative art, and cosmetology.
02.0 Give evidence of an understanding of the sociological, psychological, spiritual, physical, and legal needs of the family and community, and how to meet those needs in the treatment, handling, and disposition of the dead human body.
03.0 Explain the concepts of death, disinfection, preservation, and restoration of a dead human body.
04.0 Identify fundamental principles of personal and public health protection measures, and define the embalmer's obligation to this function.
05.0 Identify, define, and employ the necessary technical terminology to facilitate communication and cooperation with members of allied professions and the public.

06.0 Give evidence of personal manifestations of continued professional growth through education and research.

07.0 Identify those common conditions surrounding death which may prove of potential concern to the forensic pathologist.

08.0 Take care of the dead in a manner which recognizes the inherent dignity of man.

09.0 Identify the privileges of and be able to, through professional practices, fulfill the responsibilities of licensure.

10.0 Interpret and communicate the purposes, procedures, and values of funeral service.

11.0 Counsel people regarding funeralization.

12.0 Plan, implement, and direct a funeral according to the sociological, psychological, and theological needs of the person being served.

13.0 Identify and comply with the laws pertaining to funeral service practice and public health.

14.0 Manage personnel, facilities, and other resources.

15.0 Apply business principles and practices to funeral service.

16.0 Recognize the importance of inter-professional and intra-professional relationship and responsibilities.

17.0 Recognize the procedures for becoming an active member of the community and participating in community affairs.

18.0 Demonstrate employability skills.

19.0 Demonstrate an understanding of entrepreneurship.

20.0 Demonstrate knowledge of blood borne diseases, including AIDS.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Funeral Services
Secondary Number:
Postsecondary Number: 0312.030100

01.0 SATISFACTORILY PERFORM THE BASIC TECHNIQUES OF EMBALMING AND RESTORATIVE ART AND COSMETOLOGY--The student will be able to:

01.01 Demonstrate a knowledge of the body systems, with special emphasis on the circulatory system, to the degree needed to give a working basis for studies in such related subjects as Embalming, Pathology, Public Health, and Restorative Art.
01.02 Specify representative chemicals in embalming fluids (arterial, cavity and accessory) and give their respective functions.
01.03 Describe the basic theories and laws of chemistry and relate their importance to both the living and deceased.
01.04 Identify and demonstrate the use of standard embalming instruments, machines and accessories.
01.05 Describe prior to, and during the procedure of embalming, the problems presented by disease processes and etiological factors.
01.06 Identify potentially harmful chemicals used in the preparation room, and the precautions to be taken with each.
01.07 Relate specified types of restoration to the correct embalming procedures.
01.08 Select, from a specified cosmetic medium, the correct colorants (compounds) to achieve a natural appearance under various conditions.
01.09 Exhibit a skill in modeling which reflects his ability to restore a problem case.
01.10 Interpret a photograph by evaluating the highlights and shadows, equal and unequal facial proportions, the specific form of the head, and the chief characteristics of each feature.
01.11 Identify and describe the norms of the head and face (direct and profile views), and each of the four facial features - identify four variations of these norms.
01.12 Classify and explain the principles of pigmentary (color) mixtures, and relate their application to cosmetic compounds and the influence of adjacent colors on one another in the funeral setting.
01.13 Name and locate three external body structures of the skull and explain how each influences surface form.
01.14 Identify and describe the use of various cosmetic and restorative materials and equipment.

02.0 GIVE EVIDENCE OF AN UNDERSTANDING OF THE SOCIOLOGICAL, PSYCHOLOGICAL, SPIRITUAL, PHYSICAL, AND LEGAL NEEDS OF THE FAMILY AND COMMUNITY, AND HOW TO MEET THOSE NEEDS IN THE TREATMENT, HANDLING, AND DISPOSITION OF THE DEAD HUMAN BODY--The student will be able to:

02.01 Describe the varieties of funeralization seen in major religious and ethnic sub-cultures and in fraternal and military groups in America.
02.02 Relate contemporary sociological, theological, and philosophical thought to the matter of death, dying, bereavement and mourning in America.
02.03 Discuss and illustrate the interplay in society of custom and contemporary funeralization practices.
02.04 Distinguish among taboos, mores, folkways, customs, habits, laws, rites, rituals and ceremonies as sociological terms applied to American funerals.
02.05 State significant changes in funeralization and embalming methods during the last half century.
02.06 Describe the nature and meaning of death in different civilizations and cultures.

03.0 EXPLAIN THE CONCEPTS OF DEATH, DISINFECTION, PRESERVATION AND RESTORATION OF A DEAD HUMAN BODY--The student will be able to:

03.01 Explain the common types of death.
03.02 Identify the physical states of matter and differentiate between physical and chemical changes.
03.03 Identify essential characteristics of autolysis, hydrolysis fermentation, and putrefaction in the area of the chemistry of decomposition.
03.04 Identify the essential characteristics of carbohydrates, lipids, and proteins in the area of basic biochemistry.
03.05 Define organic chemistry and describe the characteristic features of aliphatic and cyclic compounds, hydrocarbons, alcohols, aldehydes, ketones, acids, esters, ethers, and amines.
03.06 Identify and describe the prerequisites for specified restorative and cosmetic treatments.

04.0 IDENTIFY FUNDAMENTAL PRINCIPLES OF PERSONAL AND PUBLIC HEALTH PROTECTION MEASURES, AND DEFINE THE EMBALMER'S OBLIGATION TO THIS FUNCTION--The student will be able to:

04.01 Explain the embalming-disinfection process as a public health procedure.
04.02 Describe infectious processes and explain the methods of transmission and control of common infectious diseases, with special emphasis upon their applications to the environment of the embalmer, the funeral director, and the public.
04.03 Identify and explain special treatments for cases involving common infections, traumatic and pathological conditions.
04.04 Recognize the pathological conditions which require special procedures in the removal, handling, preparation and disposition of human remains.
04.05 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
04.06 Document the relationship between his understanding of normal structure and functions of the human body and his development of healthful living habits.

04.07 Describe and demonstrate personal and environmental disinfection and decontamination procedures; explain proper use of major chemical disinfectants.

05.0 IDENTIFY, DEFINE, AND EMPLOY THE NECESSARY TECHNICAL TERMINOLOGY TO FACILITATE COMMUNICATION AND COOPERATION WITH MEMBERS OF ALLIED PROFESSIONS AND THE PUBLIC--The student will be able to:

05.01 Demonstrate his acquisition and understanding of anatomical terminology at a level that will enable him to communicate effectively with members of allied professions and the lay public.
05.02 Identify common laboratory procedures and the common units of scientific measurement.
05.03 Identify the characteristic features of solutions, suspensions, and emulsions, and the processes of diffusion including osmosis, dialysis and hydrolysis.
05.04 Identify a list of elements and their valences, radicals, ions, compounds and reactions related to problems faced by the embalmer and funeral director, and give their symbols, formulas, and equations.
05.05 Differentiate between the beneficial micro-organisms and the actual pathogens and opportunists commonly associated with both the living human host and dead human remains.
05.06 Demonstrate an understanding of host parasite relations and interactions, and the requirements for successful parasitism.
05.07 Identify host defense mechanisms and demonstrate general knowledge of innate, natural and active immunologic responses.
05.08 Identify basic bacterial and fungal morphology and physiology.
05.09 Advise the layman of the medical benefits of post-mortem examination.

06.0 GIVE EVIDENCE OF PERSONAL MANIFESTATIONS OF CONTINUED PROFESSIONAL GROWTH THROUGH EDUCATION AND RESEARCH--The student will be able to:

06.01 Identify the reasons one should cooperate in community programs for controlling disease and promoting medical research.
06.02 Give evidence of his appreciation of, and interest in, the human body as a subject for independent study and continuing intellectual growth.

07.0 IDENTIFY THOSE COMMON CONDITIONS SURROUNDING DEATH WHICH MAY PROVE OF POTENTIAL CONCERN TO THE FORENSIC PATHOLOGIST--The student will be able to:

07.01 Identify and explain those special conditions attending a death whereby notification of the death is required to be given to the proper official (such as Coroner, Public Health Officer, Veterans Administration, etc.).
07.02 Identify the technical manifestations of death which may be of medico-legal significance.

08.0 TAKE CARE OF THE DEAD IN A MANNER WHICH RECOGNIZES THE INHERENT DIGNITY OF MAN--The student will be able to:

08.01 Give evidence of respect for human remains.

09.0 IDENTIFY THE PRIVILEGES OF AND BE ABLE TO, THROUGH PROFESSIONAL PRACTICES, FULFILL THE RESPONSIBILITIES OF LICENSURE--The student will be able to:

09.01 Identify the privileges and their limitations accorded the licensee with regard to caring for the dead, and serving the living.

09.02 Identify the responsibilities of the funeral director to those who have called him with regard to:

09.02.01 Providing services and merchandise as selected.

09.02.02 Explaining the financial aspects of the funeral, and pricing method used.

09.02.03 Explaining death benefits and/or burial allowances.

09.02.04 Notifying the clergy of the death, if appropriate.

09.02.05 Coordinating with the clergy on religious aspects of the funeral.

09.02.06 Explaining merchandise and related representations regarding final description.

09.02.07 Preparing a financial memorandum pertaining to services, selected merchandise, supplemental items and cash advances.

09.02.08 Explaining applicable laws, rules and regulations.

09.02.09 Referring for professional counseling where family needs so indicate.

09.03 Identify the responsibilities of the funeral director to his profession with regard to:

09.03.01 Costs and procedures instituted where the services of two funeral directors are required.

09.03.02 Public education regarding funeralization.

09.04 Identify the responsibilities of the funeral director to the clergy in the matter of the policies, rules and regulations of churches.

09.05 Perform the following tasks applicable to the state in which he intends to gain a license:

09.05.01 State the limitations placed upon the practice of the funeral director/embalmer.

09.05.02 Summarize the law, rules and regulations pertaining to:

09.05.02.01 The transportation of the dead.

09.05.02.02 Requirements and specifications of the funeral home, including the preparation room.

09.05.02.03 Define terms specified in the license laws, rules and regulations.

09.05.02.04 Identify the qualifications required of applicants for funeral director/mortician license.

09.05.02.05 Identify the grounds for issuance, revocation, suspension or refusal to renew or issue licenses.

09.05.02.06 Identify requirements for the conducting of funerals.
09.05.02.07 Identify the procedures for filing a complaint concerning a violation of the licensing law.
09.05.02.08 Identify provisions regarding reciprocity/courtesy cards.

10.0 INTERPRET AND COMMUNICATE THE PURPOSES, PROCEDURES, AND VALUES OF FUNERAL SERVICES--The student will be able to:

10.01 Identify the purposes which the funeral serves for the family, friends, church, occupational associates, and community of the deceased.
10.02 Identify the values of the funeral.
10.03 Define common terms used in funeral services.
10.04 Identify the psychological purposes and values of the funeral.
10.05 Identify the sociological purposes and values of the funeral.
10.06 Organize and be prepared to deliver a speech on the purposes and values of the funeral.
10.07 Identify the philosophical purposes and values of funeral service.

11.0 COUNSEL PEOPLE REGARDING FUNERALIZATION--The student will be able to:

11.01 Identify the major financial considerations that confront a bereaved family.
11.02 Identify the times or situations during which a funeral director will make use of counseling.
11.03 State the areas of counseling normally covered during funeralizations.
11.04 Describe the process of funeralization.
11.05 Describe contemporary opinions regarding psychology of death, grief, and bereavement.
11.06 Describe how the manner and cause of death affects the psychological needs of the bereaved.
11.07 List the information of importance to obtain during each type of counseling situation.
11.08 Identify and appraise the basic personal and personality problems that may appear during counseling situations.
11.09 Classify and analyze the various forms of funeral rites.
11.10 Describe contemporary opinions regarding sociology of death, grief, and bereavement.
11.11 Describe three or more types of counseling techniques applicable to funeral services and give reasons for the use of each in individual circumstances.
11.12 Describe recent developments pertaining to the theologies of death, grief and bereavement.
11.13 Describe the effects of the Uniform Anatomical Gift Act on funeralization.
11.14 Identify and describe stages of dying.

12.0 PLAN, IMPLEMENT, AND DIRECT A FUNERAL ACCORDING TO THE SOCIOLOGICAL, PSYCHOLOGICAL AND THEOLOGICAL NEEDS OF THE PERSON BEING SERVED--The student will be able to:

12.01 Develop a warm, friendly and tactful attitude towards the family at the first meeting.
12.02 Identify the items of information which are necessary to complete the following forms:
    12.02.01 Obituary
    12.02.02 Death certificate
    12.02.03 Social Security forms (SSA, 719, SSA 721)
    12.02.04 Veteran's forms (Marker, Flag, Burial Allowance)
    12.02.05 Burial/Transportation permits
    12.02.06 Release/Authorization forms
12.03 Identify the person(s) who are qualified to give permission for release of the deceased from a hospital, or to sign the hospital death record, if required.
12.04 Identify the information to be secured from, and given to, the family upon initial family contact.
12.05 Describe the multiple steps required between initial notification of death and removal of the deceased.
12.06 Identify person(s) who qualify to authorize autopsy and embalming, and to approve the purpose and disclosure statement.
12.07 Identify the items and considerations usually included in the arrangement conference.
12.08 Identify the purpose of the death certificate.
12.09 Identify the appropriate times usually considered necessary to meet the funeral needs of those being served.
12.10 Identify the consideration normally involved in setting the order for the processional and recessional of a funeral service including casket, casket beaer, children, clergy, friends, fraternal orders, funeral directors, honorary bearers, next of kin, relatives and service organization.
12.11 Describe the multiple steps required between initial notification of death and removal of the deceased when the bereaved are not present at the time of death, regardless of the place or manner of death - including, but not limited to, the funeral director's determination of the need for a personal conference and/or counseling of the bereaved prior to the funeral arrangement conference.
12.12 Identify the items of clothing ordinarily required for the deceased.
12.13 Describe the proper techniques and equipment employed in the dignified removal of remains under diverse conditions.
12.14 Identify the reasons which require a discussion involving the family, the officiating clergyman, and the funeral director regarding visitation hours, time of funeral, and other aspects of the service.
12.15 Identify the purpose of the Burial-Transit Permit.
12.16 Write obituary and death notices.
12.17 Identify the purpose and content of preselection counseling.
12.18 Identify the participants functioning in funeral service and explain their duties.

12.19 Describe considerations involved in the dignified movement of casketed remains.
12.20 State considerations for determining the order of the funeral procession.
12.21 Coordinate a variety of committal rites when these are a part of one funeral.
12.22 Identify the psychological and sociological value of the funeral arrangement conference.
12.23 Identify methods of dealing with inter-personal conflicts among family members.
12.24 Discuss dismissal procedures for leaving the grave site.
12.25 Explain the problems involved in harmonizing the colors of caskets in the funeral setting.
12.26 Describe the various types of floral arrangements and the considerations involved in their placement.
12.27 Identify requirement/procedure pertaining to cremation, calcination and burial at sea.

13.0 IDENTIFY AND COMPLY WITH THE LAWS PERTAINING TO FUNERAL SERVICE PRACTICE AND PUBLIC HEALTH--The student will be able to:

13.01 Identify legally:
    13.01.01 The nature of the right of the funeral director to take custody of a dead body, and the length of time such custody may be exercised.
    13.01.02 The procedures for recovering the body.
    13.01.03 The theory governing the right to recover for mutilation of a body, and the reasons for recovery of damages when mutilation results from negligence.
    13.01.04 The duty of the funeral director regarding the personal effects of a decedent.
    13.01.05 The basis of a funeral director's liability for the negligence of a volunteer driver in a funeral procession.
    13.01.06 The legal duty of a funeral director regarding permits required by law.
    13.01.07 The reasons for legal limitation on a funeral bill charged against an estate where creditor's claims exceed the assets of the estate.
    13.01.08 How a testator may provide in his will for the payment of funeral expenses.
    13.01.09 The duty of the funeral director for compliance with the Federal Trade Commission Funeral Rules.
    13.01.10 The duty of the funeral director for compliance with the Magnuson-Moss Warranty Act (1975).
    13.01.11 The duty of the funeral director for compliance with the provisions of Federal Wage and Hour Laws.
13.02 Describe status of a funeral bill as a charge against the estate.
13.03 Identify:
    13.03.01 The conditions under which a funeral director must have permission before permitting an autopsy in his establishment, and state whether that permission may be qualified, restricted or revoked.

13.03.02 The liability of an embalmer for shaving a beard, cutting hair or otherwise altering the appearance of a body.

13.03.03 The legal duty of the funeral director regarding the personal effects of a decedent.

13.03.04 The extent of control a funeral director has over a funeral, and his legal duties to those attending a funeral or viewing a body at his funeral home.

13.03.05 The general rule in the determination of the validity of funeral expenses.

13.03.06 Which items are allowable in a funeral bill and which items are not allowable.

13.03.07 The legal basis for the modifications of the common law rule imposing liability upon the husband for the wife's funeral expenses.

13.03.08 Under what legal basis a widow may be required to pay the funeral expense of her deceased indigent husband.

13.04 Identify:

13.04.01 The liability of a volunteer who individually contracts to pay a funeral bill.

13.04.02 The liability of an executor or administrator for funeral expenses.

13.04.03 Why a funeral director should be familiar with the law of disinterment.

13.04.04 The circumstances under which exhumation is permitted in criminal cases, and in civil cases.

13.04.05 The usual procedure for obtaining a disinterment authorization, and the legal principles under which disinterment statutes are upheld.

13.04.06 Who has the primary right to disinter a body, and the nature of the crime of disinterment without proper authorization.

13.04.07 The grounds upon which a funeral home can be prohibited from further operation in a residential district.

13.04.08 Whether a funeral home may be excluded from a subdivision by agreement of the property owners.

13.04.09 The conditions under which a funeral home or cemetery may be considered a nuisance per se.

13.04.10 Why the power of eminent domain may be invoked to acquire land for a public cemetery.

13.04.11 The power under which cemeteries may be regulated by the state, and what specific action must be taken to convert land to cemetery use.

13.04.12 The authority under which a private cemetery may enforce rules which control burial in it.

13.04.13 Why the owner of a cemetery lot may not use it for purposes other than burial, and whether or not he has the right to decorate and mark the grave.

13.04.14 Under what authority cemeteries are required to provide admittance to graves.

13.04.15 What kind of offense the grave desecration is.

13.05 Identify:

13.05.01 The essentials of a valid contract.
13.05.02 The reasons for maintaining death certificates.
13.05.03 How the remains may be transported by common carrier.
13.05.04 The legal consideration where persons die without medical attention.
13.05.05 The general order of nearest of kin including all relatives.
13.05.06 The legal implications of the concept of a "Decent Christian Burial."
13.05.07 Two reasons for filing an embalming report for each body prepared by the funeral home.
13.05.08 The function of a court of equity.
13.05.09 Two classes of bodies legally available for dissection.
13.05.10 The legal doctrine regarding the photographing of a dead body.
13.05.11 The privileges and limitations of one holding the power of attorney.
13.05.12 The liability of the funeral director for the custody of the remains.

13.06 Describe the legal basis for funeral service licensure stating the legal obligation of funeral and its purpose.

13.07 Identify:
13.07.01 The doctrine of *Stare Decesis*.
13.07.02 Whether a person may dispose of his body by will, whether a dead body may be insured, and whether it may be bought and sold.
13.07.03 Whether a dead body may be the subject of an action of replevin.
13.07.04 The authority of a ship over dead bodies.
13.07.05 The restrictions on burials of those dying of a communicable disease.
13.07.06 The conditions under which a dead body must be embalmed.
13.07.07 The effect of the decedent's wishes with respect to exercising the right and duty of disposition.
13.07.08 The proper position the funeral director should take when survivors of a decedent disputes the exercise of the right of disposition.

13.08 Define cremation and list the circumstances under which it is illegal.

13.09 Describe the rights of a party in controlling a funeral, and the rights of a party to attend a funeral.

13.10 Define "funeral contract", and state the legality of funeral contracts made by a decedent prior to death.

13.11 Describe the rights of the decedent in pre-arranging his own funeral.

13.12 Describe the legal limitation imposed in pre-arrangement agreements.

13.13 Describe the legal status of a dead body.

13.14 Identify the legal theory governing the right to recover from mutilation of a body, and the reasons for recovery of damages when mutilation results from negligence.

13.15 Identify the circumstances under which the state or one of its subdivisions is liable for funeral expenses.
13.16 Define and give the purpose of a Coroner's/Medical investigator's inquest and inquiry.
13.17 Identify the rules and regulations governing burial in a National Cemetery.
13.18 Distinguish between the property and no-property theories of dead human bodies.
13.19 Identify two sources from which the rights and duties of a funeral director are derived.
13.20 Identify those steps a funeral director should take before building or purchasing a funeral home.
13.21 Distinguish between a cooperation, a partnership, and a proprietorship, and state the advantages and disadvantages of each.
13.22 Identify two forms of legally binding sales contracts.
13.23 Identify the conditions under which a note would be considered void.
13.24 Identify the preferred persons in the granting of letters of administration.
13.25 Distinguish between a stock and a bond.

14.0 MANAGE PERSONNEL, FACILITIES, AND OTHER RESOURCES--The student will be able to:

14.01 Answer the telephone properly.
14.02 Receive initial contact information accurately and appropriately.
14.03 Identify importance of:
  14.03.01 The appearance and cleanliness of the funeral home, preparation room, funeral coach, limousine, and parking lot.
  14.03.02 The need for confidentiality of funeral home records, family records and financial data.
  14.03.03 Maintaining staff communications.
14.04 Identify the procedure for filing the death certificate at the proper agency and obtaining related permits if required.
14.05 Identify equipment necessary for the removal of an adult, child or infant from a hospital, residence or other place of death.
14.06 Identify all equipment appropriate for any funeral service.
14.07 Identify the procedure for properly receiving those who make a visitation to the funeral home.
14.08 Identify the procedures for dressing and casketing the remains.
14.09 Identify the procedures for placing the deceased in a visitation room.
14.10 Identify equipment needed to accomplish interment, inurement, and entombment.
14.11 Identify the procedures for the completion of insurance forms.
14.12 Complete the recording of information in a register book.

15.0 APPLY BUSINESS PRINCIPLES AND PRACTICES TO FUNERAL SERVICE--The student will be able to:

15.01 Prepare a financial memorandum pertaining to services provided, merchandise selected, cash advances, and supplemental items.
15.02 Define and properly use the terminology associated with funeral merchandise, merchandise display, and funeral supplies.
15.03 Identify, define, and describe the various types of outer enclosures.
15.04 Differentiate between Functional, Unit, B-Unit and Itemization methods of quoting the price(s) of funeral service.
15.05 Apply basic accounting principles in keeping mortuary records.
15.06 Identify the major items of income and expenses which should be included in the budget of a funeral home.
15.07 Define basic accounting terms.
15.08 Analyze financial data, make financial decisions, and recognize the effects of economies on existing funeral services.
15.09 Identify the dual role of the funeral director, and list the major responsibilities of each role.
15.10 Distinguish between the direct and indirect approaches in helping clients to select merchandise, and list the advantages and disadvantages of each method.
15.11 Identify the insurance needs of a funeral director, and funeral service practice.
15.12 Identify the application of the Federal Truth in Lending Act to funeral service.
15.13 Identify the importance of purchase disclosures.
15.14 Identify the applications of the Federal Wage and Hour Act to funeral service.
15.15 Distinguish a cognovit from a promissory note.

16.0 RECOGNIZE THE IMPORTANCE OF INTER-PROFESSIONAL AND INTRA-PROFESSIONAL RELATIONSHIP AND RESPONSIBILITIES--The student will be able to:

16.01 Identify common interest areas existing between funeral directors, florists, cemeterians, monument dealers, news media, the legal profession, the judiciary, hospital administrators, governmental agencies and local police.
16.02 Identify the aims and purposes of a funeral director-clergy relations committee.
16.03 Identify common concerns inherent in physician-funeral director relationships.
16.04 Name the major funeral director associations.
16.05 Identify the aims and purposes of a funeral director-pathologist autopsy committee.
16.06 Describe the structure and function of the Conference of Funeral Service Examining Boards, Inc.
16.07 Describe the structure of "multi-unit" funeral home organizations (public stock corporations).
16.08 Describe the structure and function of the Commission of Schools of the American Board of Funeral Service Education.
16.09 Describe the structure and function of the American Board of Funeral Service Education.
16.10 Describe the membership structure of the National Funeral Directors Association and other professional associations in the industry.

17.0 RECOGNIZE THE PROCEDURES FOR BECOMING AN ACTIVE MEMBER OF THE COMMUNITY AND PARTICIPATING IN COMMUNITY AFFAIRS--The student will be able to:

17.01 Identify the necessary items to be considered in establishing a funeral home-public relations program.
17.02 Distinguish between institutional and funeral home advertising and state the primary purpose of each.

18.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

18.01 Conduct a job search.
18.02 Secure information about a job.
18.03 Identify documents that may be required when applying for a job.
18.04 Complete a job application.
18.05 Demonstrate competence in job interview techniques.
18.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
18.07 Identify acceptable work habits.
18.08 Demonstrate knowledge of how to make job changes appropriately.
18.09 Demonstrate acceptable employee health habits.

19.0 DEMONSTRATE AND UNDERSTANDING OF ENTREPRENEURSHIP--The student will be able to:

19.01 Define entrepreneurship.
19.02 Describe the importance of entrepreneurship to the American economy.
19.03 List the advantages and disadvantages of business ownership.
19.04 Identify the risks involved in ownership of a business.
19.05 Identify the necessary personal characteristics of a successful entrepreneur.
19.06 Identify the business skills needed to operate a business efficiently and effectively.

20.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

20.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
20.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
20.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
20.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to patients, following Centers for Disease Control (CDC) guidelines.
20.05 Demonstrate knowledge of the legal aspect of AIDS, including testing.

03179900CL **July 1997**

Florida Department of Education
CLUSTER CURRICULUM FRAMEWORK

Cluster Title: Health Careers
Cluster Type: Job Preparatory
Occupational Area: Health Science Education
Components: Core, 10 Programs, 10 Completion Points

Secondary

Grade Level: 10-12, 30, 31
Facility Code: see program
VSO: HOSA
Coop Method: Not First Responder/Nursing Assistant with restriction.
Apprenticeship: No

I. **PURPOSE**: The purpose of the programs in this cluster is to prepare students for employment or advanced training in the health occupations industry. The programs in this cluster also provide students the opportunity to be cross-trained in a variety of entry level positions.

This cluster of programs focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **CLUSTER STRUCTURE**: This cluster is a planned sequence of instruction consisting of a two credit core and one or more courses leading to an occupational completion point. The two credit core is required as a prerequisite for all programs and options. Secondary students completing the two required courses will not have to repeat the core in post-secondary. When the recommended sequence is followed, the structure allows students to complete at specified points for employment or remain for advanced training or cross-training. A student who completes the applicable competencies at any occupational completion point may either continue with the training program or exit as an occupational completer.

Specific course information regarding licensure and certification guidelines is included with the skill standards portion of the framework. The two required core courses in this career cluster are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

The optional programs and related courses available in this career cluster are:

8417130 - Allied Health Assisting
    8417100 - Health Careers 1 (one credit)
    8417110 - Health Careers 2 (one credit)
    8417131 - Allied Health Assisting 3 (one credit)

- 8417140 - Dental Aide 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417141 - Dental Aide 3 95-96 (one credit)

- 8417150 - Dental Lab Assisting 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417151 - Dental Lab Assisting 3 95-96 (one credit)
  - 8417152 - Dental Lab Assisting 4 95-96 (one credit)

- 8417160 - Electrocardiograph Aide 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417161 - Electrocardiograph Aide 3 95-96 (one-half credit)

- 8417170 - First Responder 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417171 - First Responder 3 95-96 (one credit)

- 8417180 - Health Unit Coordinator 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417181 - Health Unit Coordinator 3 95-96 (one credit)

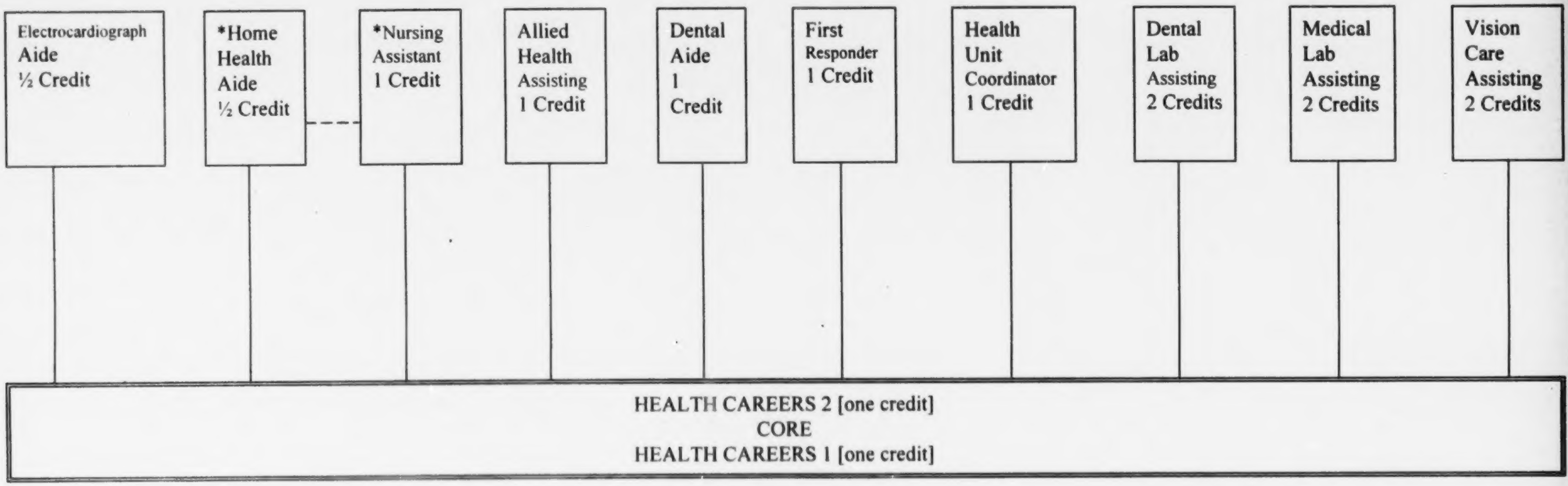
- 8417190 - Home Health Aide 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417191 - Home Health Aide 3 95-96 (one-half credit)

- 8417200 - Medical Lab Assisting 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417201 - Medical Lab Assisting 3 95-96 (one credit)
  - 8417202 - Medical Lab Assisting 4 95-96 (one credit)

- 8417200 - Nursing Assistant 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417211 - Nursing Assistant 3 95-96 (one credit)

- 8417200 - Vision Care Assisting 95-96
  - 8417100 - Health Careers 1 (one credit)
  - 8417110 - Health Careers 2 (one credit)
  - 8417231 - Vision Care Assisting 3 95-96 (one credit)
  - 8417232 - Vision Care Assisting 4 95-96 (one credit)

THE FOLLOWING DIAGRAM ILLUSTRATES THE HEALTH CAREERS CLUSTER STRUCTURE


Electrocardiograph Aide ½ Credit
*Home Health Aide ½ Credit
*Nursing Assistant 1 Credit
Allied Health Assisting 1 Credit
Dental Aide 1 Credit
First Responder 1 Credit
Health Unit Coordinator 1 Credit
Dental Lab Assisting 2 Credits
Medical Lab Assisting 2 Credits
Vision Care Assisting 2 Credits
HEALTH CAREERS 2 [one credit]
CORE
HEALTH CAREERS 1 [one credit]

* Patient Care Assistant competencies have been completed when both NA and HHA are taken.

III. **LABORATORY ACTIVITIES**: Students will perform skills representative of major areas of health care in the laboratory setting. Team teaching between teachers of science particularly Anatomy and Physiology and Health Occupations instructors is encouraged.

IV. **SPECIAL NOTE**: Health Occupations Students of America, Inc. (HOSA)is the appropriate vocational student organization for providing leadership training and for reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

The course Anatomy and Physiology may be substituted for the course Health Careers 1.

The cooperative method of instruction is appropriate for the programs in this cluster EXCEPT FOR FIRST RESPONDER RESTRICTIONS OR Nursing Assistant (see specific program). Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, teacher, and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupations which the student has chosen as a career goal. The student must receive compensation for work performed.

When a secondary student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which the student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: Generic equipment lists are available for the programs in this cluster and are printed in a supplement to this document.

Health Career students who have achieved at least one occupational completion point may receive one science credit in Anatomy and Physiology in accordance with 236.081(1)(o) F.S.

Students need at least three credits including the 2 pre-requisites (Health Careers 1 and 2) and must be a program completer to qualify for Gold Seal Endorsement. Refer to 239.117 F.S. and related rules.

COURSE	TEACHER CERTIFICATION AREAS																		
	ANYHEALTH OCC G	PRAC NURSE @7@G	REG NURSE G	PARAMEDIC @7G	NURSING ED @5	MED ASST @7G	TEC X RAY @7G	LAW ENF @7G	CORR OFF @7G	PUB SERV @7G	FIRE FIGHT @7G	EKG @7G	LAB ASST @7G	LAB TECH @7G	TEC MED !7!G	TEC OPTICS @7G	DENTAL HYG @7G	DEN ASST @7G	DEN LABTEC @7G
Health Careers 1	X																		
Health Careers 2	X																		
Allied Health Assisting 3	X																		
Dental Aide 3																	X	X	
Dental Lab Assisting 3																			X
Dental Lab Assisting 4																			X
EKG Aide 3		X	X	X	X	X	X					X	X	X					
First Responder 3		X	X	X				X	X	X	X								
Health Unit Coordinator 3		X	X		X										X				
Home Health Aide 3		X	X		X														
Medical Lab Assisting 3													X	X	X				
Medical Lab Assisting 4													X	X	X				
Nursing Assistant 3		X	X		X														
Vision Care 3																X			
Vision Care 4																X			

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Allied Health Assisting

	Secondary
Program Numbers	**8417130**
CIP Number	0317.029903
Grade Level	10-12, 30, 31
Length	3 credits
Certification	8417100 - ANY HEALTH OCCUP ED G 8417110 - ANY HEALTH OCCUP ED G 8417131 - ANY HEALTH OCCUP ED G
Facility Code	253
Basic Skills	N/A
Math	
Language	
Reading	

MAJOR CONCEPTS/CONTENT: The three courses in this program are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)
8417131 - Allied Health Assisting 3 (one credit)

The purpose of this program is to prepare a student for employment as an allied health aide, medical assistant (66005437) medical laboratory assistant (078.381-010), occupational therapy aide (355.377-010), physical therapy aide (355.354-010), respiratory therapy aide or radiologic aide.

Students will perform skills representative of at least, but not limited to, three areas of allied health care in the laboratory and clinical settings. Major areas of allied health are defined as physical therapy, emergency, radiation, laboratory and respiratory medicine, and occupational therapy. Other areas of health, medicine, dentistry, or veterinary may be included, with instructor provided competencies. Clinical experience is defined as activities performed in the clinical setting under the supervision of a health professional duly certified/licensed in the selected occupational fields.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida

Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

INTENDED OUTCOMES: After successfully completing this program the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A
ALLIED HEALTH ASSISTANT - Industry Title

After successfully completing this course the student will be able to:

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Perform skills representative of at least three major allied health areas in the school laboratory before beginning the clinical phase.
18.0 Successfully complete a clinical rotation in at least three major allied health areas.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Allied Health Assisting
Secondary Number: 8417130
Postsecondary Number:

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available incluing resourced to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.

12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.

16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 PERFORM SKILLS REPRESENTATIVE OF AT LEAST THREE MAJOR ALLIED HEALTH AREAS IN THE SCHOOL LABORATORY BEFORE BEGINNING THE CLINICAL PHASE--The student will be able to:

17.01 Perform skills related to the body systems.
17.02 If clinical laboratory science is one of the selected allied health areas to be taught, students will:
    17.02.01 Correctly pipet using automatic and manual pipette. Note: OSHA prohibits mouth pipetting!
    17.02.02 Perform dip stick testing on blood and urine.
    17.02.03 Type blood samples.
    17.02.04 Prepare blood slides for differential blood count.
    17.02.05 Stain blood slides.
    17.02.06 Plate microbiological specimen on appropriate media.
    17.02.07 Report urine specific gravity, color and characteristics.
    17.02.08 Perform centrifuge operation and maintenance.
    17.02.09 Focus a microscope and examine specimens using low, high-dry, and oil immersion lens.
    17.02.10 Demonstrate knowledge of specimen differentiation and procedure interferences.
    17.02.11 Perform communication skills specifically related to laboratory science.
    17.02.12 Using an artificial arm, perform venipunctures.
    17.02.13 Name and discuss the avenues of laboratory medicine practice.
17.03 If physical therapy is one of the selected allied health areas to be taught, students will:
    17.03.01 Describe the functions of bones and muscles as related to the practice of physical therapy.
    17.03.02 Define disability and identify types of disabilities.
    17.03.03 Name and discuss the avenues of physical therapy practice.
    17.03.04 Describe equipment used in physical therapy.
    17.03.05 Teach crutch and walker use and care.
    17.03.06 Perform safe body mechanics and transfer techniques.
    17.03.07 Describe the use of modalities (i.e. Ultrasound)
    17.03.09 Perform hydrotherapy.
    17.03.10 Perform communication skills specifically related to physical therapy.
    17.03.11 Assist clients to eat using prompting techniques.
    17.03.12 Identify, describe, and demonstrate the use of adaptive feeding devices.
    17.03.13 Identify augmented communication devices and describe the purpose of each.

17.03.14 Demonstrate techniques used in active and passive range of motion exercises.

17.03.15 Instruct patients in bed/wheelchair mobility activities.

17.03.16 Describe the relationship between long-term and short-term goals.

17.04 If occupational therapy is one of the selected allied health areas to be taught, students will:

17.04.01 Describe equipment used in occupational therapy.

17.04.02 Make splints.

17.04.03 Perform feeding and dressing skills using adaptive equipment.

17.04.04 Perform feeding and dressing skills using one hand.

17.04.05 Perform communication skills specifically related to occupational therapy.

17.04.06 Perform and instruct range and motion exercises.

17.04.07 Name and discuss the avenues of physical therapy practice.

17.04.08 Train the client in clothing care skills.

17.04.09 Train the client in food preparation skills.

17.04.10 Train the client in money management skills.

17.05 If respiratory therapy is one of the selected allied health areas to be taught, students will:

17.05.01 Name and discuss the avenues of Respiratory Care Practice.

17.05.02 Describe common respiratory diseases (asthma, emphysema, chronic bronchitis, atelectasis) and common medications used to treat respiratory diseases.

17.05.03 Recognize normal breath sounds when ausculating the chest with a stethoscope.

17.05.04 Assemble and practice using gas reducing and flow regulating equipment.

17.05.05 Demonstrate and discuss the use of incentive spirometers.

17.05.06 Differentiate between various oxygen delivery devices (nasal cannulas, simple and rebreathing masks, oxyhoods, enclosures.

17.05.07 Stock shelves with, process, and perform preventative maintenance on respiratory care equipment.

17.05.08 Check emergency equipment assigned to respiratory care.

17.05.09 Demonstrate/discuss the use of postural drainage and percussion.

17.05.10 Discuss and practice the use of the pulse oxymeter.

17.05.11 Describe the equipment and use of humidity/aerosol.

17.06 If medical record keeping is one of the selected allied health areas to be taught, students will:

17.06.01 Demonstrate an understanding of basic medical terminology e.g. prefixes, suffixes and root words related to major body systems.

17.06.02 Demonstrate an understanding of straight numerical, alphabetical and terminal digit filing.

17.06.03 Demonstrate computer literacy, keybording and retrieval skills.

17.07 If Radiologic Technology is one of the selected allied health areas to be taught, students will:

- 17.07.01 Identify the function of a cassette, film, and screen.
- 17.07.02 Describe how radiation produces an image on film.
- 17.07.03 Identify the process by which x-ray film is developed.
- 17.07.04 Process a film through an automatic processor.
- 17.07.05 Identify anatomical position and terminology related to position (supine, prone, proximal, distal, medial, lateral, superior, inferior, anterior/ventral, and posterior/dorsal).
- 17.07.06 Identify patient properly (check identification band, etc.)
- 17.07.07 Explain appropriate exam(s) to the patient.
- 17.07.08 Perform safe body mechanics and transferring skills of patient onto x-ray table.
- 17.07.09 Position patient for exam(s) (chest, KUB, hand and foot).
- 17.07.10 Position x-ray tube to simulate exposure for exam(s) (chest, KUB, hand and foot).
- 17.07.11 Position patient in supine, prone, lateral, oblique, AP, PA of appropriate part.
- 17.07.12 Use an artificial arm to perform venipuncture.

18.0 SUCCESSFULLY COMPLETE A CLINICAL ROTATION IN AT LEAST 3 MAJOR ALLIED HEALTH AREAS--The student will be able to:

- 18.01 Demonstrate skills in the clinical setting as outlined in 17.0.
- 18.02 Complete three (3) clinical rotations under the supervision of a duly licensed/certified allied health care worker.
- 18.03 Exhibit behavior consistent with the professional ethics required of each of the allied health areas being studied.

Program: 8417130 Allied Health Assisting

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417131
Course Title: Allied Health Assisting 3
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 PERFORM SKILLS REPRESENTATIVE OF AT LEAST THREE MAJOR ALLIED HEALTH AREAS IN THE SCHOOL LABORATORY BEFORE BEGINNING THE CLINICAL PHASE--The student will be able to:

17.01 Perform skills related to the body systems.
17.02 If clinical laboratory science is one of the selected allied health areas to be taught, students will:
  17.02.01 Correctly pipet using automatic and manual pipette. Note: OSHA prohibits mouth pipetting!
  17.02.02 Perform dip stick testing on blood and urine.
  17.02.03 Type blood samples.
  17.02.04 Prepare blood slides for differential blood count.
  17.02.05 Stain blood slides.
  17.02.06 Plate microbiological specimen on appropriate media.
  17.02.07 Report urine specific gravity, color and characteristics.
  17.02.08 Perform centrifuge operation and maintenance.
  17.02.09 Focus a microscope and examine specimens using low, high-dry, and oil immersion lens.
  17.02.10 Demonstrate knowledge of specimen differentiation and procedure interferences.
  17.02.11 Perform communication skills specifically related to laboratory science.
  17.02.12 Using an artificial arm, perform venipunctures.
  17.02.13 Name and discuss the avenues of laboratory medicine practice.
17.03 If physical therapy is one of the selected allied health areas to be taught, students will:
  17.03.01 Describe the functions of bones and muscles as related to the practice of physical therapy.
  17.03.02 Define disability and identify types of disabilities.
  17.03.03 Name and discuss the avenues of physical therapy practice.
  17.03.04 Describe equipment used in physical therapy.
  17.03.05 Teach crutch and walker use and care.
  17.03.06 Perform safe body mechanics and transfer techniques.
  17.03.07 Describe the use of modalities (i.e. Ultrasound)
  17.03.09 Perform hydrotherapy.
  17.03.10 Perform communication skills specifically related to physical therapy.
  17.03.11 Assist clients to eat using prompting techniques.

17.03.12 Identify, describe, and demonstrate the use of adaptive feeding devices.
17.03.13 Identify augmented communication devices and describe the purpose of each.
17.03.14 Demonstrate techniques used in active and passive range of motion exercises.
17.03.15 Instruct patients in bed/wheelchair mobility activities.
17.03.16 Describe the relationship between long-term and short-term goals.

17.04 If occupational therapy is one of the selected allied health areas to be taught, students will:
17.04.01 Describe equipment used in occupational therapy.
17.04.02 Make splints.
17.04.03 Perform feeding and dressing skills using adaptive equipment.
17.04.04 Perform feeding and dressing skills using one hand.
17.04.05 Perform communication skills specifically related to occupational therapy.
17.04.06 Perform and instruct range and motion exercises.
17.04.07 Name and discuss the avenues of physical therapy practice.
17.04.08 Train the client in clothing care skills.
17.04.09 Train the client in food preparation skills.
17.04.10 Train the client in money management skills.

17.05 If respiratory therapy is one of the selected allied health areas to be taught, students will:
17.05.01 Name and discuss the avenues of Respiratory Care Practice.
17.05.02 Describe common respiratory diseases (asthma, emphysema, chronic bronchitis, atelectasis) and common medications used to treat respiratory diseases.
17.05.03 Recognize normal breath sounds when ausculating the chest with a stethoscope.
17.05.04 Assemble and practice using gas reducing and flow regulating equipment
17.05.05 Demonstrate and discuss the use of incentive spirometers.
17.05.06 Differentiate between various oxygen delivery devices (nasal cannulas, simple and rebreathing masks, oxyhoods, enclosures.
17.05.07 Stock shelves with, process, and perform preventative maintenance on respiratory care equipment.
17.05.08 Check emergency equipment assigned to respiratory care.
17.05.09 Demonstrate/discuss the use of postural drainage and percussion.
17.05.10 Discuss and practice the use of the pulse oxymeter.
17.05.11 Describe the equipment and use of humidity/aerosol.

17.06 If medical record keeping is one of the selected allied health areas to be taught, students will:

    17.06.01 Demonstrate an understanding of basic medical terminology e.g. prefixes, suffixes and root words related to major body systems.
    17.06.02 Demonstrate an understanding of straight numerical, alphabetical and terminal digit filing.
    17.06.03 Demonstrate computer literacy, keybording and retrieval skills.

17.07 If Radiologic Technology is one of the selected allied health areas to be taught, students will:

    17.07.01 Identify the function of a cassette, film, and screen.
    17.07.02 Describe how radiation produces an image on film.
    17.07.03 Identify the process by which x-ray film is developed.
    17.07.04 Process a film through an automatic processor.
    17.07.05 Identify anatomical position and terminology related to position (supine, prone, proximal, distal, medial, lateral, superior, inferior, anterior/ventral, and posterior/dorsal).
    17.07.06 Identify patient properly (check identification band, etc.)
    17.07.07 Explain appropriate exam(s) to the patient.
    17.07.08 Perform safe body mechanics and transferring skills of patient onto x-ray table.
    17.07.09 Position patient for exam(s) (chest, KUB, hand and foot).
    17.07.10 Position x-ray tube to simulate exposure for exam(s) (chest, KUB, hand and foot).
    17.07.11 Position patient in supine, prone, lateral, oblique, AP, PA of appropriate part.
    17.07.12 Use an artificial arm to perform venipuncture.

18.0 SUCCESSFULLY COMPLETE A CLINICAL ROTATION IN AT LEAST 3 MAJOR ALLIED HEALTH AREAS--The student will be able to:

18.01 Demonstrate skills in the clinical setting as outlined in 17.0.
18.02 Complete three (3) clinical rotations under the supervision of a duly licensed/certified allied health care worker.
18.03 Exhibit behavior consistent with the professional ethics required of each of the allied health areas being studied.

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Florida Department of Education
INTENDED OUTCOMES

Program Title: Dental Aide 95-96

Secondary

Program Numbers	**8417140**	
CIP Number	0317.010103	
Grade Level	10-12, 30, 31	
Length	3 credits	
Certification	8417100 -	ANY HEALTH OCCUP ED G
	8417110 -	ANY HEALTH OCCUP ED G
	8417141 -	DENTAL HYG @5 DENTAL ASST @7 G DENTAL TEC $7 $G
Facility Code	252	

Basic Skills - N/A
Math
Language
Reading

MAJOR CONCEPTS/CONTENT: The three courses in this program are:
8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)
8417141 - Dental Aide 3 95-96 (one credit)

This program is designed to provide classroom theory and practical application in assisting dentists with actual dental procedures in the care of a patient. It is designed to prepare students for employment as dental assistants (66002436), or dental aides in a dental office or clinic, or to pursue advanced dental careers. Clinical learning experiences are required and must correlate with didactic and laboratory experiences.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:
8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

INTENDED OUTCOMES: *OCCUPATIONAL COMPLETION POINT - DATA CODE A* (01.0 - 26.0)

DENTAL AIDE - Industry Title

After successfully completing this course, the student will be able to:

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Use dental terminology.
18.0 Identify structures and explain functions and pathologies of dental anatomy.
19.0 Identify disease prevention and perform infection control procedures.
20.0 Describe the legal and ethical responsibilities of the dental health care worker.
21.0 Identify, describe, and maintain dental instruments and equipment.
22.0 Identify properties, uses and manipulation of dental materials which include gypsum, restorative material, acrylics, dental cements, impression materials and waxes.
23.0 Perform basic dental laboratory procedures.
24.0 Perform basic assisting.
25.0 Identify specialty procedures.
26.0 Perform general office procedures.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Dental Aide 95-96
Secondary Number: 8417140

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

    01.01 Define cells, tissues, organs, and systems.
    01.02 Identify body cavities and the organs they contain.
    01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

    02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
    02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

    03.01 Describe cell structure and function in healthy tissue.
    03.02 Describe cell structure and function in diseased tissue.
    03.03 List the four main types of tissue.
    03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

    04.01 Describe the structure and function of each body system.
    04.02 Identify common diseases in each body system.
    04.03 Identify health careers related to each system.
    04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

    05.01 List and explain direct causes of disease.
    05.02 List and explain indirect causes of disease.
    05.03 Explain the chain of transmission.
    05.04 Discuss the immune system.
    05.05 Define and explain homeostasis.
    05.06 List and discuss the body's defense mechanisms.
    05.07 Describe DNA and its role in human heredity.
    05.08 Describe the role of human genetics in relation to genetic diseases.

05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.

08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.

12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 USE DENTAL TERMINOLOGY--The student will be able to:

17.01 Identify and define common dental terms.
17.02 Prepare records using proper terminology.

18.0 IDENTIFY STRUCTURES AND EXPLAIN FUNCTIONS AND PATHOLOGIES OF DENTAL ANATOMY--The student will be able to:

18.01 Identify teeth and their landmarks.
18.02 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
18.03 Recognize and describe oral pathological conditions.

19.0 IDENTIFY DISEASE PREVENTION AND PERFORM INFECTION CONTROL PROCEDURES--The student will be able to:

19.01 Differentiate between aseptic and non-aseptic environments.
19.02 Describe methods of disinfection and sterilization used in a dental office.

20.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER--The student will be able to:

20.01 Define commonly used legal vocabulary relating to dentistry.
20.02 Describe legal and ethical consideration/obligations in the dental team-patient relationship.
20.03 Explain risk management.

21.0 IDENTIFY, DESCRIBE, AND MAINTAIN DENTAL INSTRUMENTS AND EQUIPMENT--The student will be able to:

21.01 Identify various types, functions, and operations of dental operatory and laboratory equipment.
21.02 Identify types and functions of various dental instruments.
21.03 Maintain dental operatory equipment, laboratory equipment, and instruments.

22.0 IDENTIFY PROPERTIES, USES AND MANIPULATION OF DENTAL MATERIALS WHICH INCLUDE GYPSUM, RESTORATIVE MATERIAL, ACRYLICS, DENTAL CEMENTS, IMPRESSION MATERIALS AND WAXES--The student will be able to:

22.01 Demonstrate an understanding of the composition of dental materials, their physical properties and chemical properties and the manner in which the properties relate to manipulation.
22.02 Demonstrate the manipulative skills necessary to properly prepare dental materials for use both intraorally and extraorally.
22.03 Identify the primary objectives of the Council on Dental Materials and Devices of the American Dental Association.

22.04 Identify the two international organizations responsible for establishing standards for dental materials.
22.05 Describe the physical conditions in the oral cavity which influence the selection of dental materials.
22.06 Describe the biological characteristics of dental materials which may limit their use in the oral cavity.
22.07 List the three factors which must be considered when selecting dental materials.
22.08 Define terms related to dental materials and science.

23.0 PERFORM BASIC DENTAL LABORATORY PROCEDURES--The student will be able to:

23.01 Identify properties and uses and manipulate gypsum.
23.02 Identify properties and uses and manipulate impression materials.
23.03 Identify properties and uses and manipulate waxes.
23.04 Perform dental laboratory procedures to include the fabrication of casts and custom trays.
23.05 Perform laboratory infection control.

24.0 PERFORM BASIC ASSISTING--The student will be able to:

24.01 Evacuate and maintain the operating field.
24.02 Assemble instruments and assist in general/and specialty dental procedures.
24.03 Describe dental office emergencies and their prevention and treatment.

25.0 IDENTIFY SPECIALTY PROCEDURES--The student will be able to:

25.01 Identify and describe Oral Maxillofacial surgery.
25.02 Identify and describe Orthodontics.
25.03 Identify and describe Periodontics.
25.04 Identify and describe Prosthodontics.
25.05 Identify and describe Pedodontics.
25.06 Identify and describe Endodontics.
25.07 Identify and describe Public Health Dentistry.

26.0 PERFORM GENERAL OFFICE PROCEDURES--The student will be able to:

26.01 Maintain appointment control.
26.02 Maintain an active recall system.
26.03 Prepare and maintain accurate patient records.
26.04 Prepare and maintain patient financial records and collect fees.
26.05 Prepare and maintain dental office inventory control.
26.06 Demonstrate public relations responsibilities of the secretary/receptionist.
26.07 Demonstrate skills on office equipment.
26.08 Maintain office environment.
26.09 Receive and dismiss patients and visitors.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.

05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417141
Course Title: Dental Aide 3 95-96
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 USE DENTAL TERMINOLOGY--The student will be able to:

17.01 Identify and define common dental terms.
17.02 Prepare records using proper terminology.

18.0 IDENTIFY STRUCTURES AND EXPLAIN FUNCTIONS AND PATHOLOGIES OF DENTAL ANATOMY--The student will be able to:

18.01 Identify teeth and their landmarks.
18.02 Describe the histological components of the head, oral cavity, and elements of the teeth and supporting structures.
18.03 Recognize and describe oral pathological conditions.

19.0 IDENTIFY DISEASE PREVENTION AND PERFORM INFECTION CONTROL PROCEDURES--The student will be able to:

19.01 Differentiate between aseptic and non-aseptic environments.
19.02 Describe methods of disinfection and sterilization used in a dental office.

20.0 DESCRIBE THE LEGAL AND ETHICAL RESPONSIBILITIES OF THE DENTAL HEALTH CARE WORKER--The student will be able to:

20.01 Define commonly used legal vocabulary relating to dentistry.
20.02 Describe legal and ethical consideration/obligations in the dental team-patient relationship.
20.03 Explain risk management.

21.0 IDENTIFY, DESCRIBE, AND MAINTAIN DENTAL INSTRUMENTS AND EQUIPMENT--The student will be able to:

21.01 Identify various types, functions, and operations of dental operatory and laboratory equipment.
21.02 Identify types and functions of various dental instruments.
21.03 Maintain dental operatory equipment, laboratory equipment, and instruments.

22.0 IDENTIFY PROPERTIES, USES AND MANIPULATION OF DENTAL MATERIALS WHICH INCLUDE GYPSUM, RESTORATIVE MATERIAL, ACRYLICS, DENTAL CEMENTS, IMPRESSION MATERIALS AND WAXES--The student will be able to:

22.01 Demonstrate an understanding of the composition of dental materials, their physical properties and chemical properties and the manner in which the properties relate to manipulation.
22.02 Demonstrate the manipulative skills necessary to properly prepare dental materials for use both intraorally and extraorally.
22.03 Identify the primary objectives of the Council on Dental Materials and Devices of the American Dental Association.
22.04 Identify the two international organizations responsible for establishing standards for dental materials.
22.05 Describe the physical conditions in the oral cavity which influence the selection of dental materials.
22.06 Describe the biological characteristics of dental materials which may limit their use in the oral cavity.
22.07 List the three factors which must be considered when selecting dental materials.
22.08 Define terms related to dental materials and science.

23.0 PERFORM BASIC DENTAL LABORATORY PROCEDURES--The student will be able to:

23.01 Identify properties and uses and manipulate gypsum.
23.02 Identify properties and uses and manipulate impression materials.
23.03 Identify properties and uses and manipulate waxes.
23.04 Perform dental laboratory procedures to include the fabrication of casts and custom trays.
23.05 Perform laboratory infection control.

24.0 PERFORM BASIC ASSISTING--The student will be able to:

24.01 Evacuate and maintain the operating field.
24.02 Assemble instruments and assist in general/and specialty dental procedures.
24.03 Describe dental office emergencies and their prevention and treatment.

25.0 IDENTIFY SPECIALTY PROCEDURES--The student will be able to:

25.01 Identify and describe Oral Maxillofacial surgery.
25.02 Identify and describe Orthodontics.
25.03 Identify and describe Periodontics.
25.04 Identify and describe Prosthodontics.
25.05 Identify and describe Pedodontics.
25.06 Identify and describe Endodontics.
25.07 Identify and describe Public Health Dentistry.

26.0 PERFORM GENERAL OFFICE PROCEDURES--The student will be able to:

26.01 Maintain appointment control.
26.02 Maintain an active recall system.
26.03 Prepare and maintain accurate patient records.
26.04 Prepare and maintain patient financial records and collect fees.
26.05 Prepare and maintain dental office inventory control.

26.06 Demonstrate public relations responsibilities of the secretary/receptionist.
26.07 Demonstrate skills on office equipment.
26.08 Maintain office environment.
26.09 Receive and dismiss patients and visitors.

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Florida Department of Education
INTENDED OUTCOMES

Program Title: Dental Laboratory Assisting 95-96

Secondary

Program Numbers	**8417150**	
CIP Number	0317.019902	
Grade Level	10-12, 30, 31	
Length	4 credits	
Certification:		
8417100 Health Careers 1		ANY HEALTH OCCUP ED G
8417110 Health Careers 2		ANY HEALTH OCCUP ED G
8417151 Dental Laboratory Assisting 3 95-96		DEN LABTEC @7 G
8417152 Dental Laboratory Assisting 4 95-96		DEN LABTEC @7 G
Facility Code:	252	
Basic Skills	N/A	
Math		
Language		
Reading		

The four courses in this program are:

- 8417100 Health Careers 1 (one credit)
- 8417110 Health Careers 2 (one credit)
- 8417151 Dental Laboratory Assisting 3 95-96 (one credit)
- 8417152 Dental Laboratory Assisting 4 95-96 (one credit)

MAJOR CONCEPTS/CONTENT: The four courses in this program are:

- 8417100 - Health Careers 1 (one credit)
- 8417110 - Health Careers 2 (one credit)
- 8417151 - Dental Laboratory Assisting 3 95-96 (one credit)
- 8417152 - Dental Laboratory Assisting 4 95-96 (one credit)

The program is designed to prepare students for employment as dental laboratory technician apprentices (712.381-022) or dental laboratory assistants or to pursue further education in the dental health field. Simulation laboratory experiences are integrated with the didactic portion of this program. Students perform tasks representative of dental laboratory practice.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

- 8417100 - Health Careers 1 (one credit)
- 8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

INTENDED OUTCOMES: After successfully completing this course the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE C

DENTAL LABORATORY ASSISTANT - Industry Title

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Demonstrate communication and computational skills used in a dental laboratory.
18.0 Identify anatomic structure and function of body systems in relation to dental laboratory science.
19.0 Demonstrate computer literacy for dental labs.
20.0 Practice selected dental laboratory techniques.
21.0 Practice accepted principles of safety in the laboratory setting.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Dental Laboratory Assisting 95-96
Secondary Number: 8417150
Postsecondary Number:

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis

12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 DEMONSTRATE COMMUNICATION AND COMPUTATIONAL SKILLS USED IN A DENTAL LABORATORY--The student will be able to:

17.01 Calculate using appropriate dental laboratory formulae.
17.02 Use appropriate dental terminology and abbreviations.
17.03 Demonstrate the ability to interpret dental prescriptions.
17.04 Demonstrate communication skills specific to the dental laboratory setting.

18.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DENTAL LABORATORY SCIENCE--The student will be able to:

18.01 Describe the structure and function of head and neck anatomy.
18.02 Apply understanding of head and neck anatomy in relation to patient use of dental appliances.

19.0 DEMONSTRATE COMPUTER LITERACY FOR DENTAL LABS--The student will be able to:

19.01 Describe the uses of computers in the health occupation being studied.
19.02 Demonstrate computational, keyboarding and retrieval skills relevant to job requirements of the dental laboratory industry.
19.03 Demonstrate computer skills in each clinical rotation.

20.0 PRACTICE SELECTED DENTAL LABORATORY TECHNIQUES--The student will be able to:

20.01 Fabricate selected dental restorations.
20.02 Fabricate selected prostheses.
20.03 Fabricate selected dental appliances.

21.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN THE DENTAL LABORATORY SETTING--The student will be able to:

21.01 Demonstrate safe use, care and maintenance of equipment and materials.
21.02 Properly identify and label models, prostheses, etc.
21.03 Recognize atypical behavior.
21.04 Follow emergency procedures for a dental laboratory.
21.05 Demonstrate knowledge of sterile technique and disease prevention in the dental lab.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 08.01 Discuss the legal framework of the health care occupations.
- 08.02 Explain the medical liability of health care workers.
- 08.03 Explain the patients' "Bill of Rights."
- 08.04 Describe a Code of Ethics consistent with the health care occupation.
- 08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 08.06 Recognize the limits of authority and responsibility of health care workers.
- 08.07 Recognize and report illegal and unethical practices of health care workers.
- 08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 09.01 Develop a basic understanding of the structure and function of the body systems.
- 09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 09.03 Identify psychological reactions to illness including defense mechanisms.
- 09.04 Recognize the steps in the grief process.
- 09.05 Explain basic concepts of positive self image, wellness and stress.
- 09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 10.01 Demonstrate the safe use of medical equipment.
- 10.02 Recognize and report safety hazards.
- 10.03 Identify and practice security procedures for medical supplies and equipment.
- 10.04 Demonstrate proper body mechanics.
- 10.05 Demonstrate the procedure for properly identifying patients.
- 10.06 Demonstrate procedures for the safe transport and transfer of patients.
- 10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 11.01 Monitor and record vital signs.
- 11.02 Describe legal parameters relating to the administration of emergency care.
- 11.03 Obtain and maintain BLS for Healthcare Providers or higher.

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11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417151
Course Title: Dental Laboratory Assisting 3 95-96
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 DEMONSTRATE COMMUNICATION AND COMPUTATIONAL SKILLS USED IN A DENTAL LABORATORY--The student will be able to:

17.01 Calculate using appropriate dental laboratory formulae.
17.02 Use appropriate dental terminology and abbreviations.
17.03 Demonstrate the ability to interpret dental prescriptions.
17.04 Demonstrate communication skills specific to the dental laboratory setting.

18.0 IDENTIFY ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO DENTAL LABORATORY SCIENCE--The student will be able to:

18.01 Describe the structure and function of head and neck anatomy.
18.02 Apply understanding of head and neck anatomy in relation to patient use of dental appliances.

19.0 DEMONSTRATE COMPUTER LITERACY FOR DENTAL LABS--The student will be able to:

19.01 Describe the uses of computers in the health occupation being studied.
19.02 Demonstrate computational, keyboarding and retrieval skills relevant to job requirements of the dental laboratory industry.
19.03 Demonstrate computer skills in each clinical rotation.

20.0 PRACTICE SELECTED DENTAL LABORATORY TECHNIQUES--The student will be able to:

20.01 Fabricate selected dental restorations.
20.02 Fabricate selected prostheses.
20.03 Fabricate selected dental appliances.

21.0 PRACTICE ACCEPTED PRINCIPLES OF SAFETY IN THE DENTAL LABORATORY SETTING--The student will be able to:

21.01 Demonstrate safe use, care and maintenance of equipment and materials.
21.02 Properly identify and label models, prostheses, etc.
21.03 Recognize atypical behavior.
21.04 Follow emergency procedures for a dental laboratory.

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21.05 Demonstrate knowledge of sterile technique and disease prevention in the dental lab.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417152
Course Title: Dental Laboratory Assisting 4 95-96
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

This course may be taken concurrently with Dental Laboratory Assisting 1. This course is a continuation of Dental Laboratory Assisting 1 and will allow the student to practice all aspects of Dental Laboratory Assisting.

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Florida Department of Education
INTENDED OUTCOMES

Program Title: Electrocardiograph Aide 95-96

	Secondary	
Program Numbers	**8417160**	
CIP Number	0317.020302	
Grade Level	10-12, 30, 31	
Length	2.5 credits	
Certification:		
8417100 Health Careers 1		ANY HEALTH OCCUP ED G
8417110 Health Careers 2		ANY HEALTH OCCUP ED G
8417161 Electrocardiograph Aide 3 95-96		NURSING ED @5 LAB TECH @7 G EKG @7 G PRAC NURSE @7 @G LAB ASST @7 G REG NURSE G PARAMEDIC @7 G MED ASST @7 G TEC X RAY @7 G
Facility Code:	252	
Basic Skills	N/A	
Math		
Language		
Reading		

MAJOR CONCEPTS/CONTENT: The two and one-half courses in this program are:
8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)
8417161 - Electrocardiograph Aide 3 95-96 (one-half credit)

The program is designed to prepare students for employment as EKG technicians (electrocardiograph aides) (32926211). Clinical learning experiences are an integral part of this program.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:
8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR)

HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

INTENDED OUTCOMES: After successfully completing this program the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A
ELECTROCARDIOGRAPH AIDE - Industry Title

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Interpret, apply and transcribe medical terminology.
18.0 Perform patient care techniques in the health care facility.
19.0 Demonstrate knowledge of, apply and use medical instrumentation modalities.
20.0 Describe cardiovascular drugs, their actions, use and adverse effects.
21.0 Recognize electrocardiograph rhythms.
22.0 Identify legal and ethical responsibilities of an EKG Aide.
23.0 Describe and demonstrate cardiac wellness and rehabilitation.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Electrocardiograph Aide 95-96
Secondary Number: 8417160
Postsecondary Number:

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

- 01.01 Define cells, tissues, organs, and systems.
- 01.02 Identify body cavities and the organs they contain.
- 01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

- 02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
- 02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

- 03.01 Describe cell structure and function in healthy tissue.
- 03.02 Describe cell structure and function in diseased tissue.
- 03.03 List the four main types of tissue.
- 03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

- 04.01 Describe the structure and function of each body system.
- 04.02 Identify common diseases in each body system.
- 04.03 Identify health careers related to each system.
- 04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

- 05.01 List and explain direct causes of disease.
- 05.02 List and explain indirect causes of disease.
- 05.03 Explain the chain of transmission.
- 05.04 Discuss the immune system.
- 05.05 Define and explain homeostasis.
- 05.06 List and discuss the body's defense mechanisms.
- 05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence..
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.

12.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.

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16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 INTERPRET, APPLY AND TRANSCRIBE MEDICAL TERMINOLOGY--The student will be able to:

17.01 Type 35 correct words per minute.
17.02 Interpret and transcribe terminology related to cardiovascular testing.

18.0 PERFORM PATIENT CARE TECHNIQUES IN THE HEALTH CARE FACILITY--The student will be able to:

18.01 Describe the physical and mental preparation of the patient for cardiovascular testing.
18.02 Identify patient and verify the requisition order.
18.03 Prepare patient physically and mentally for cardiovascular diagnostic testing.
18.04 Measure and record patient's vital signs and recognize and report abnormalitites.
18.05 State precautions required when performing diagnostic procedures.

19.0 DEMONSTRATE KNOWLEDGE OF, APPLY AND USE MEDICAL INSTRUMENTATION MODALITIES--The student will be able to:

19.01 Calibrate and standardize the cardiograph instrument.
19.02 Identify three types of lead systems.
19.03 Demonstrate proper lead placement.
19.04 Identify artifacts and mechanical problems.
19.05 Perform and assess a 12 lead ECG.
19.06 Describe the Holter monitoring and scanning exercise treatment.
19.07 Describe other modalities of cardiovascular diagnosis and interpretation.
19.08 Use charting and documentation skills.
19.09 State Einthoven's triangle.

20.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE AND ADVERSE EFFECTS--The student will be able to:

20.01 Describe mechanisms by which cardiovascular drugs work.
20.02 List common cardiovascular drugs.
20.03 Identify and respond to cardiac emergency.
20.04 State actions and adverse effects of commonly used cardiovascular drugs.
20.05 Differentiate between normal and abnormal ECG changes due to drugs.

21.0 RECOGNIZE ELECTROCARDIOGRAPH RHYTHMS--The student will be able to:

21.01 Recognize sinus rhythms.
21.02 Recognize atrial rhythms.
21.03 Recognize AV junctional rhythms.
21.04 Recognize extrasystoles.
21.05 Recognize ventricular rhythms.
21.06 Recognize AV Block.
21.07 List purposes of pacemakers and indications for insertion.

22.0 IDENTIFY LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

22.01 Recognize and practice legal and ethical responsibilites as they relate to an EKG aide.
22.02 Maintain a safe and efficient work environment.
22.03 Maintain EKG equipment so it will be safe and accurate.

23.0 DESCRIBE AND DEMONSTRATE CARDIAC WELLNESS AND REHABILITATION--The student will be able to:

23.01 Identify predisposing factors to heart disease.
23.02 Describe the American Heart Association diet.
23.03 Explain behavior modification and stress management.
23.04 Describe principles of physical fitness and exercise.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

- 06.01 Identify the basic components of the health care delivery system.
- 06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
- 06.03 Describe the composition and functions of a health care team.
- 06.04 Identify the general roles and responsibilities of the individual members of the health care team.
- 06.05 Develop a basic understanding of human needs throughout the lifespan.
- 06.06 Explain the importance of maintaining professional competence through continuing education.
- 06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 07.01 Develop basic listening skills.
- 07.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 07.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 07.04 Respond to verbal and non-verbal cues.
- 07.05 Compose written communication using correct spelling, grammar, and format.
- 07.06 Use appropriate medical terminology and abbreviations.
- 07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
- 07.08 Recognize the importance of patient/client education regarding health care.
- 07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
- 07.10 Demonstrate telephone usage including taking messages.
- 07.11 Demonstrate ability to give and follow directions.
- 07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.

16.02 Measure time, temperature, distance, capacity, and mass/weight.

16.03 Make and use measurements in both traditional and metric units.

16.04 Make estimates and approximations and judge the reasonableness of the result.

16.05 Convert from regular to 24 hour time.

16.06 Demonstrate ability to evaluate and draw conclusions.

16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

16.09 Calculate ratios.

Florida Department of Educatio
STUDENT PERFORMANCE STANDARDS

Course Number: 8417161
Course Title: Electrocardiograph Aide 3 95-96
Course Credit: .5

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 INTERPRET, APPLY AND TRANSCRIBE MEDICAL TERMINOLOGY--The student will be able to:

17.01 Type 35 correct words per minute.
17.02 Interpret and transcribe terminology related to cardiovascular testing.

18.0 PERFORM PATIENT CARE TECHNIQUES IN THE HEALTH CARE FACILITY--The student will be able to:

18.01 Describe the physical and mental preparation of the patient for cardiovascular testing.
18.02 Identify patient and verify the requisition order.
18.03 Prepare patient physically and mentally for cardiovascular diagnostic testing.
18.04 Measure and record patient's vital signs and recognize and report abnormalitites.
18.05 State precautions required when performing diagnostic procedures.

19.0 DEMONSTRATE KNOWLEDGE OF, APPLY AND USE MEDICAL INSTRUMENTATION MODALITIES--The student will be able to:

19.01 Calibrate and standardize the cardiograph instrument.
19.02 Identify three types of lead systems.
19.03 Demonstrate proper lead placement.
19.04 Identify artifacts and mechanical problems.
19.05 Perform and assess a 12 lead ECG.
19.06 Describe the Holter monitoring and scanning exercise treatment.
19.07 Describe other modalities of cardiovascular diagnosis and interpretation.
19.08 Use charting and documentation skills.
19.09 State Einthoven's triangle.

20.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE AND ADVERSE EFFECTS--The student will be able to:

20.01 Describe mechanisms by which cardiovascular drugs work.
20.02 List common cardiovascular drugs.
20.03 Identify and respond to cardiac emergency.
20.04 State actions and adverse effects of commonly used cardiovascular drugs.

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20.05 Differentiate between normal and abnormal ECG changes due to drugs.

21.0 RECOGNIZE ELECTROCARDIOGRAPH RHYTHMS--The student will be able to:

21.01 Recognize sinus rhythms.
21.02 Recognize atrial rhythms.
21.03 Recognize AV junctional rhythms.
21.04 Recognize extrasystoles.
21.05 Recognize ventricular rhythms.
21.06 Recognize AV Block.
21.07 List purposes of pacemakers and indications for insertion.

22.0 IDENTIFY LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

22.01 Recognize and practice legal and ethical responsibilites as they relate to an EKG aide.
22.02 Maintain a safe and efficient work environment.
22.03 Maintain EKG equipment so it will be safe and accurate.

23.0 DESCRIBE AND DEMONSTRATE CARDIAC WELLNESS AND REHABILITATION--The student will be able to:

23.01 Identify predisposing factors to heart disease.
23.02 Describe the American Heart Association diet.
23.03 Explain behavior modification and stress management.
23.04 Describe principles of physical fitness and exercise.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: First Responder 95-96

	Secondary	
Program Numbers	**8417170**	
CIP Number	0317.020502	
Grade Level	10-12, 30, 31	
Length	3 credits	
Certification:		
8417100 Health Careers 1		ANY HEALTH OCCUP ED G
8417110 Health Careers 2		ANY HEALTH OCCUP ED G
8417171 First Responder 3 95-96		PRAC NURSE @7 @G REG NURSE G PARAMEDIC @7 G LAW ENF @7 G CORR OFF @7 G PUB SERV @7 G FIRE FIGHT @7 G
Facility Code:	252	
Basic Skills	N/A	
Math		
Language		
Reading		

MAJOR CONCEPTS/CONTENT: The three courses in this program are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)
8417171 - First Responder 3 95-96 (one credit)

This is an instructional program that prepares individuals to provide initial care to sick or injured persons or as ambulance drivers and attendants (66023441). A First Responder may use this training for employment. The First Responder is the first to arrive at the scene of an injury but does not have the primary responsibility for treating and transporting the injured person(s). First Responders may include law enforcement, life guard, fire services or basic life support non-licensed personnel who act as part of an organized emergency medical services team. This program must be approved by the Department of Education utilizing standards jointly developed by the Florida Department of Law Enforcement, Florida Department of Insurance and the Emergency Medical Services Section of the Department of Health and Rehabilitative Services as specified in Section 406.435, F.S.

In accordance with 10D-66.345, F.A.C. the First Responder instructor shall issue to each student documentation of successful course completion which shall include date of issuance, student's name, name of sponsoring agency (DOE), name of training agency, and instructor's printed name and signature, plus the wording "issued pursuant to section 406.435 F.S." The instructor must also maintain on file and submit to the DOE (Health Occupations

Education, FEC 1224, 325 West Gaines Street, Tallahassee, FL 32399) within 30 days following course completion, a roster listing the names of students who successfully completed the course, the dates and location of the course, and the name of the instructor.

The student performance standards for First Responder were adapted and condensed from U. S. Department of Transportation Emergency Medical Services; First Responder Training Course, National Standard Curriculum Instructors Lesson Plan and American Society for Testing and Materials, Committee F-30. Administrators and instructors should refer to these materials for additional details.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

When the word demonstrate is used in a standard, it shall require the actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

INTENDED OUTCOMES: Students completing this course may articulate to the postsecondary program of Emergency Medical Technician.

OCCUPATIONAL COMPLETION POINT - DATA CODE A
AMBULANCE DRIVER or ATTENDANT - OES Code 66023441

After successfully completing this course, the student will be able to:

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.

07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Demonstrate an understanding of the roles and responsibilities of the first responder.
18.0 Demonstrate an understanding of medicolegal aspects.
19.0 Determine and record vital signs of a sick or injured person.
20.0 Use medical identification devices.
21.0 Conduct a primary assessment of problems that are a threat to life if not corrected immediately.
22.0 Demonstrate BLS procedures.
23.0 Recognize and control bleeding.
24.0 Recognize and control shock.
25.0 Identify and use mechanical aids to breathing.
26.0 Provide secondary assessment.
27.0 Identify musculo-skeletal injuries.
28.0 Identify the potential for a spinal injury.
29.0 Provide emergency evacuation and transfer of a sick and/or injured person.
30.0 Identify and provide initial care for a sick and/or injured patient.
31.0 Identify and care for patients who are in special situations.
32.0 Provide triage to victims of multiple casualty incidents.
33.0 Recognize life-threatening situations.
34.0 Recognize entrapment situations.
35.0 Assist with emergency childbirth.
36.0 Identify critical incident stressors.
37.0 Communicate patient information to appropriate authorities.

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July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: First Responder 95-96
Secondary Number: 8417170
Postsecondary Number:

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.

12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 DEMONSTRATE AN UNDERSTANDING OF THE ROLES AND RESPONSIBILITIES OF THE FIRST RESPONDER--The student will be able to:

17.01 Describe the role of First Responder as a member of the EMS Team.
17.02 List and describe the responsibilities of the First Responder for the provision of prehospital emergency care within the local EMS system.

18.0 DEMONSTRATE AN UNDERSTANDING OF MEDICOLEGAL ASPECTS--The student will be able to:

18.01 Describe and demonstrate an understanding of the medicolegal aspects of a First Responder's provision of emergency medical care in the jurisdiction having authority, including, but not limited to, duty to act, standard of care, consent to care, forcible restraint, abandonment, documentation and any applicable Good Samaritan Laws.
18.02 Practice within medicolegal standards.

19.0 DETERMINE AND RECORD VITAL SIGNS OF A SICK OR INJURED PERSON--The student will be able to:

19.01 Determine and record skin color, temperature & moistness.
19.02 Determine and record the level of consciousness of the injured person.

20.0 USE MEDICAL IDENTIFICATION DEVICES--The student will be able to:

20.01 Identify the most commonly used medical identification devices.
20.02 Apply the information contained on or in the medical identification devices to patient assessment and patient care procedures.

21.0 CONDUCT A PRIMARY ASSESSMENT OF PROBLEMS THAT ARE A THREAT TO LIFE IF NOT CORRECTED IMMEDIATELY--The student will be able to:

21.01 Assess for an inadequate airway, inadequate respirations, inadequate circulation and profuse bleeding.
21.02 Recognize when immediate correction is necessary.
21.03 Use spinal precautions as appropriate.

22.0 DEMONSTRATE BLS PROCEDURES--The student will be able to:

22.01 Establish and maintain an open airway.
22.02 Restore breathing and circulation by means of cardiopulmonary resuscitation.

23.0 RECOGNIZE AND CONTROL BLEEDING--The student will be able to:

23.01 Identify items that can be used to control external bleeding and minimize the contamination of open wounds.
23.02 Apply pressure dressings that will control bleeding and minimize the contamination of open wounds.
23.03 Control external bleeding by means of direct pressure and elevation.
23.04 Control external bleeding by means of pressure applied to the pressure points of the main supplying arteries.
23.05 Identify the likelihood of internal bleeding through observations of signs, symptoms and mechanisms of injury.
23.06 Care for a patient who exhibits the signs and symptoms of internal bleeding.

24.0 RECOGNIZE AND CONTROL SHOCK--The student will be able to:

24.01 Recognize the likelihood that shock may occur or be present on the basis of patient assessment and observation of a mechanism of injury.
24.02 Provide anti-shock measures as a part of routine patient care.

25.0 IDENTIFY AND USE MECHANICAL AIDS TO BREATHING--The student will be able to:

25.01 Use available mechanical devices to assure the maintenance of an open airway.
25.02 Use available mechanical devices to assist ventilation.
25.03 Use available oxygen delivery equipment.
25.04 Use available suction equipment.

26.0 PROVIDE SECONDARY ASSESSMENT--The student will be able to:

26.01 Conduct a methodical head-to-toe physical examination to discover conditions not found during the primary assessment.
26.02 Interview the sick or injured person to obtain facts relevant to the person's condition.
26.03 Interview co-workers, witnesses, family members, or other individuals to obtain facts relevant to the person's condition.

27.0 IDENTIFY MUSCULO-SKELETAL INJURIES--The student will be able to:

27.01 Identify the various types of musculo-skeletal injuries.
27.02 Immobilize and otherwise care for suspected fractures, dislocations, sprains and strains with available supplies and equipment, including commercially available and improvised devices.

28.0 IDENTIFY THE POTENTIAL FOR A SPINAL INJURY--The student will be able to:

28.01 Determine the likelihood of a spinal injury on the basis of the patient assessment and an observation of a mechanism of injury.
28.02 Perform manual spinal stabilization.
28.03 Immobilize a person who has a suspected spinal injury with available equipment.

29.0 PROVIDE EMERGENCY EVACUATION AND TRANSFER OF A SICK AND/OR INJURED PERSON--The student will be able to:

29.01 Describe situations when a person should be evacuated or transferred.
29.02 Use the most appropriate assist, drag or carry (alone or with a partner) to move a sick or injured person from a dangerous location to a safe place.
29.03 Maintain safety precautions during evacuation and transfer.

30.0 IDENTIFY AND PROVIDE INITIAL CARE FOR A SICK AND/OR INJURED PATIENT--The student will be able to:

30.01 Identify and care for patients with non-traumatic chest pain, utilizing patient assessment.
30.02 Identify and care for patients experiencing respiratory distress, utilizing patient assessment.
30.03 Identify and care for patients experiencing a diabetic emergency, utilizing patient assessment.
30.04 Identify and care for a patient who is experiencing a seizure, utilizing patient assessment.
30.05 Identify and care for a patient who has injested, inhaled, absorbed or been injected with a poisonous substance.
30.06 Identify and care for a patient who is in an altered state of consciousness, utilizing patient assessment.
30.07 Identify and care for a patient with thermal, chemical, or electrical burns, determining the severity including degree, body surface area, type, and location.
30.08 Identify and care for a patient suffering from an environmental emergency including heat cramps, heat exhaustion, heat stroke, and frostbite, utilizing patient assessment.

31.0 IDENTIFY AND CARE FOR PATIENTS WHO ARE IN SPECIAL SITUATIONS--The student will be able to:

31.01 Identify patients who have special needs.
31.02 Care for injured/ill children.
31.03 Care for the injured/ill elderly.
31.04 Care for the injured/ill physically disabled.
31.05 Care for the injured/ill developmentally disabled.

32.0 PROVIDE TRIAGE TO VICTIMS OF MULTIPLE CASUALTY INCIDENTS--The student will be able to:

32.01 Categorize the victims of multiple casualty incidents according to the severity of injury or illness on the basis of patient assessments.
32.02 Use triage tags or other identification devices available locally to indicate priorities for prehospital emergency care and transportation to medical facilities.
32.03 Work as a member of a team to perform triage at locations of multiple casualty incidents.

32.04 Work as a member of a team to perform patient assessments at locations of multiple casualty incidents.

32.05 Work as a member of a team to carry out patient care procedures at the locations of multiple casualty incidents.

33.0 RECOGNIZE LIFE-THREATENING SITUATIONS--The student will be able to:

33.01 Take steps to minimize the chance of injury or death to all involved when confronted with a potentially life-threatening situation on the basis of an assessment of a scene.

34.0 RECOGNIZE ENTRAPMENT SITUATIONS--The student will be able to:

34.01 Identify accident-related hazards and undertake hazard control measures consistent with the capabilities of the First Responder and available equipment.

34.02 Use available equipment safely to gain access to persons who are entrapped.

34.03 Use available equipment safely to disentangle persons from mechanisms of entrapment.

35.0 ASSIST WITH EMERGENCY CHILDBIRTH--The student will be able to:

35.01 Evaluate a mother to determine whether delivery is imminent.

35.02 Assist with a normal delivery.

35.03 Care for the mother and baby.

35.04 Identify abnormal childbirth situations and care for the mother and baby within the First Responder's capabilities.

36.0 IDENTIFY CRITICAL INCIDENT STRESSORS--The student will be able to:

36.01 Identify stressors which may affect the performance of a First Responder.

36.02 Identify stressors which may affect the behavior of a sick or injured person.

36.03 Carry out procedures to minimize critical incident stress.

37.0 COMMUNICATE PATIENT INFORMATION TO APPROPRIATE AUTHORITIES--The student will be able to:

37.01 Describe information regarding a patient's condition and treatment that need to be communicated.

37.02 Communicate the First Responder's observations and actions to whomever patient care is transferred.

Program: 8417170 First Responder 95-96

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417171
Course Title: First Responder 3 95-96
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 DEMONSTRATE AN UNDERSTANDING OF THE ROLES AND RESPONSIBILITIES OF THE FIRST RESPONDER--The student will be able to:

17.01 Describe the role of First Responder as a member of the EMS Team.
17.02 List and describe the responsibilities of the First Responder for the provision of prehospital emergency care within the local EMS system.

18.0 DEMONSTRATE AN UNDERSTANDING OF MEDICOLEGAL ASPECTS--The student will be able to:

18.01 Describe and demonstrate an understanding of the medicolegal aspects of a First Responder's provision of emergency medical care in the jurisdiction having authority, including, but not limited to, duty to act, standard of care, consent to care, forcible restraint, abandonment, documentation and any applicable Good Samaritan Laws.
18.02 Practice within medicolegal standards.

19.0 DETERMINE AND RECORD VITAL SIGNS OF A SICK OR INJURED PERSON--The student will be able to:

19.01 Determine and record skin color, temperature & moistness.
19.02 Determine and record the level of consciousness of the injured person.

20.0 USE MEDICAL IDENTIFICATION DEVICES--The student will be able to:

20.01 Identify the most commonly used medical identification devices.
20.02 Apply the information contained on or in the medical identification devices to patient assessment and patient care procedures.

21.0 CONDUCT A PRIMARY ASSESSMENT OF PROBLEMS THAT ARE A THREAT TO LIFE IF NOT CORRECTED IMMEDIATELY--The student will be able to:

21.01 Assess for an inadequate airway, inadequate respirations, inadequate circulation and profuse bleeding.
21.02 Recognize when immediate correction is necessary.
21.03 Use spinal precautions as appropriate.

22.0 DEMONSTRATE BLS PROCEDURES--The student will be able to:

22.01 Establish and maintain an open airway.
22.02 Restore breathing and circulation by means of cardiopulmonary resuscitation.

23.0 RECOGNIZE AND CONTROL BLEEDING--The student will be able to:

23.01 Identify items that can be used to control external bleeding and minimize the contamination of open wounds.
23.02 Apply pressure dressings that will control bleeding and minimize the contamination of open wounds.
23.03 Control external bleeding by means of direct pressure and elevation.
23.04 Control external bleeding by means of pressure applied to the pressure points of the main supplying arteries.
23.05 Identify the likelihood of internal bleeding through observations of signs, symptoms and mechanisms of injury.
23.06 Care for a patient who exhibits the signs and symptoms of internal bleeding.

24.0 RECOGNIZE AND CONTROL SHOCK--The student will be able to:

24.01 Recognize the likelihood that shock may occur or be present on the basis of patient assessment and observation of a mechanism of injury.
24.02 Provide anti-shock measures as a part of routine patient care.

25.0 IDENTIFY AND USE MECHANICAL AIDS TO BREATHING--The student will be able to:

25.01 Use available mechanical devices to assure the maintenance of an open airway.
25.02 Use available mechanical devices to assist ventilation.
25.03 Use available oxygen delivery equipment.
25.04 Use available suction equipment.

26.0 PROVIDE SECONDARY ASSESSMENT--The student will be able to:

26.01 Conduct a methodical head-to-toe physical examination to discover conditions not found during the primary assessment.
26.02 Interview the sick or injured person to obtain facts relevant to the person's condition.
26.03 Interview co-workers, witnesses, family members, or other individuals to obtain facts relevant to the person's condition.

27.0 IDENTIFY MUSCULO-SKELETAL INJURIES--The student will be able to:

27.01 Identify the various types of musculo-skeletal injuries.
27.02 Immobilize and otherwise care for suspected fractures, dislocations, sprains and strains with available supplies and equipment, including commercially available and improvised devices.

28.0 IDENTIFY THE POTENTIAL FOR A SPINAL INJURY--The student will be able to:

28.01 Determine the likelihood of a spinal injury on the basis of the patient assessment and an observation of a mechanism of injury..
28.02 Perform manual spinal stabilization.
28.03 Immobilize a person who has a suspected spinal injury with available equipment.

29.0 PROVIDE EMERGENCY EVACUATION AND TRANSFER OF A SICK AND/OR INJURED PERSON--The student will be able to:

29.01 Describe situations when a person should be evacuated or transferred.
29.02 Use the most appropriate assist, drag or carry (alone or with a partner) to move a sick or injured person from a dangerous location to a safe place.
29.03 Maintain safety precautions during evacuation and transfer.

30.0 IDENTIFY AND PROVIDE INITIAL CARE FOR A SICK AND/OR INJURED PATIENT--The student will be able to:

30.01 Identify and care for patients with non-traumatic chest pain, utilizing patient assessment.
30.02 Identify and care for patients experiencing respiratory distress, utilizing patient assessment.
30.03 Identify and care for patients experiencing a diabetic emergency, utilizing patient assessment.
30.04 Identify and care for a patient who is experiencing a seizure, utilizing patient assessment.
30.05 Identify and care for a patient who has injested, inhaled, absorbed or been injected with a poisonous substance.
30.06 Identify and care for a patient who is in an altered state of consciousness, utilizing patient assessment.
30.07 Identify and care for a patient with thermal, chemical, or electrical burns, determining the severity including degree, body surface area, type, and location.
30.08 Identify and care for a patient suffering from an environmental emergency including heat cramps, heat exhaustion, heat stroke, and frostbite, utilizing patient assessment.

31.0 IDENTIFY AND CARE FOR PATIENTS WHO ARE IN SPECIAL SITUATIONS--The student will be able to:

31.01 Identify patients who have special needs.
31.02 Care for injured/ill children.
31.03 Care for the injured/ill elderly.
31.04 Care for the injured/ill physically disabled.
31.05 Care for the injured/ill developmentally disabled.

32.0 PROVIDE TRIAGE TO VICTIMS OF MULTIPLE CASUALTY INCIDENTS--The student will be able to:

32.01 Categorize the victims of multiple casualty incidents according to the severity of injury or illness on the basis of patient assessments.
32.02 Use triage tags or other identification devices available locally to indicate priorities for prehospital emergency care and transportation to medical facilities.
32.03 Work as a member of a team to perform triage at locations of multiple casualty incidents.
32.04 Work as a member of a team to perform patient assessments at locations of multiple casualty incidents.
32.05 Work as a member of a team to carry out patient care procedures at the locations of multiple casualty incidents.

33.0 RECOGNIZE LIFE-THREATENING SITUATIONS--The student will be able to:

33.01 Take steps to minimize the chance of injury or death to all involved when confronted with a potentially life-threatening situation on the basis of an assessment of a scene.

34.0 RECOGNIZE ENTRAPMENT SITUATIONS--The student will be able to:

34.01 Identify accident-related hazards and undertake hazard control measures consistent with the capabilities of the First Responder and available equipment.
34.02 Use available equipment safely to gain access to persons who are entrapped.
34.03 Use available equipment safely to disentangle persons from mechanisms of entrapment.

35.0 ASSIST WITH EMERGENCY CHILDBIRTH--The student will be able to:

35.01 Evaluate a mother to determine whether delivery is imminent.
35.02 Assist with a normal delivery.
35.03 Care for the mother and baby.
35.04 Identify abnormal childbirth situations and care for the mother and baby within the First Responder's capabilities.

36.0 IDENTIFY CRITICAL INCIDENT STRESSORS--The student will be able to:

36.01 Identify stressors which may affect the performance of a First Responder.
36.02 Identify stressors which may affect the behavior of a sick or injured person.
36.03 Carry out procedures to minimize critical incident stress.

37.0 COMMUNICATE PATIENT INFORMATION TO APPROPRIATE AUTHORITIES--The student will be able to:

37.01 Describe information regarding a patient's condition and treatment that need to be communicated.
37.02 Communicate the First Responder's observations and actions to whomever patient care is transferred.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Health Unit Coordinator 95-96

	Secondary
Program Numbers	**8417180**
CIP Number	0317.051301
Grade Level	10-12, 30, 31
Length	3 credits

Certification:

8417100 Health Careers 1	ANY HEALTH OCCUP ED G
8417110 Health Careers 2	ANY HEALTH OCCUP ED G
8417181 Health Unit Coordinator 3 95-96	PRAC NURSE @7 @G REG NURSE G TEC MED !7 !G NURSING ED @5

Facility Code:	252
Basic Skills	N/A
Math	
Language	
Reading	

MAJOR CONCEPTS/CONTENT: The three courses in this program are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)
8417181 - Health Unit Coordinator 3 95-96 (one credit)

This program is designed to prepare students for employment as ward clerks (245.362-014) or health unit coordinators. Transcription of physicians' orders is an integral part of this course. This competency is achieved through simulated practice with standard equipment and supplies used in a health care facility by the health unit coordinator. Clinical learning experiences are an integral part of this program.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

It is recommended that completers of this program take the National Association of Health Unit Coordinators Certification examination which is offered annually.

INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A

WARD CLERK - DOT Code 245.362-014

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Demonstrate legal and ethical behaviors.
18.0 Organize and maintain efficient work practices.
19.0 Perform clerical duties.
20.0 Practice safety/security.
21.0 Read, interpret and transcribe physicians' orders.
22.0 Use interpersonal skills effectively.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Health Unit Coordinator 95-96
Secondary Number: 8417180
Postsecondary Number:

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.

12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIORS--The student will be able to:

17.01 Identify legal and ethical principles regarding the patients' charts, correcting errors, confidentiality, transcribing, patient contact and job description.
17.02 Identify and follow hospital policies.
17.03 Identify the components of the National Association of Health Unit Coordinator's "Code of Ethics."

18.0 ORGANIZE AND MAINTAIN EFFICIENT WORK PRACTICES--The student will be able to:

18.01 Prepare and post unit information lists.
18.02 Maintain a supply of unit inventory supplies and forms.
18.03 Maintain patient key plate system.
18.04 Distribute forms and articles from in-basket.
18.05 Identify, store and maintain unit equipment/supplies in a neat and orderly manner.

19.0 PERFORM CLERICAL DUTIES--The student will be able to:

19.01 Record patients allergies.
19.02 Prepare and add forms to chart.
19.03 Record vital signs and patient information.
19.04 Prepare patients' admission chart.
19.05 Record admission data on unit records.
19.06 Prepare discharge chart for medical records.
19.07 Obtain previous admission records/X-rays.
19.08 Post all reports on charts.
19.09 File and retrieve assorted forms.
19.10 Perform patient admission, transfer and discharge procedures.
19.11 Enter data/computer code.

20.0 PRACTICE SAFETY/SECURITY--The student will be able to:

20.01 Initiate codes upon nurse's directions.
20.02 Identify institution's security policies/procedures.

21.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS--The student will be able to:

21.01 Identify all types of physician's orders.
21.02 Prioritize orders for transcription.
21.03 Prepare and route requisitions manually or via computer.
21.04 Arrange for ordered consultations.
21.05 Schedule patients' treatments or therapy with other hospital departments.

22.0 USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

22.01 Accept and place telephone calls and relay messages.
22.02 Greet and direct professionals and visitors.
22.03 Operate communication systems.
22.05 Adapt to changing conditions.
22.06 Use courtesy, tact, patience and assertiveness techniques in role playing situations.
22.07 Explain unit activities to on-coming staff.
22.09 Identify and use "chain of command" in an institution/agency.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.

05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417181
Course Title: Health Unit Coordinator 3 95-96
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIORS--The student will be able to:

- 17.01 Identify legal and ethical principles regarding the patients' charts, correcting errors, confidentiality, transcribing, patient contact and job description.
- 17.02 Identify and follow hospital policies.
- 17.03 Identify the components of the National Association of Health Unit Coordinator's "Code of Ethics."

18.0 ORGANIZE AND MAINTAIN EFFICIENT WORK PRACTICES--The student will be able to:

- 18.01 Prepare and post unit information lists.
- 18.02 Maintain a supply of unit inventory supplies and forms.
- 18.03 Maintain patient key plate system.
- 18.04 Distribute forms and articles from in-basket.
- 18.05 Identify, store and maintain unit equipment/supplies in a neat and orderly manner.

19.0 PERFORM CLERICAL DUTIES--The student will be able to:

- 19.01 Record patients allergies.
- 19.02 Prepare and add forms to chart.
- 19.03 Record vital signs and patient information.
- 19.04 Prepare patients' admission chart.
- 19.05 Record admission data on unit records.
- 19.06 Prepare discharge chart for medical records.
- 19.07 Obtain previous admission records/X-rays.
- 19.08 Post all reports on charts.
- 19.09 File and retrieve assorted forms.
- 19.10 Perform patient admission, transfer and discharge procedures.
- 19.11 Enter data/computer code.

20.0 PRACTICE SAFETY/SECURITY--The student will be able to:

- 20.01 Initiate codes upon nurse's directions.
- 20.02 Identify institution's security policies/procedures.

21.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS--The student will be able to:

21.01 Identify all types of physician's orders.
21.02 Prioritize orders for transcription.
21.03 Prepare and route requisitions manually or via computer.
21.04 Arrange for ordered consultations.
21.05 Schedule patients' treatments or therapy with other hospital departments.

22.0 USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

22.01 Accept and place telephone calls and relay messages.
22.02 Greet and direct professionals and visitors.
22.03 Operate communication systems.
22.05 Adapt to changing conditions.
22.06 Use courtesy, tact, patience and assertiveness techniques in role playing situations.
22.07 Explain unit activities to on-coming staff.
22.09 Identify and use "chain of command" in an institution/agency.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Home Health Aide 95-96

	Secondary	PSAV
Program Numbers	**8417190**	See Patient Care Assistant Cluster for PSAV information.
CIP Number	0317.040401	
Grade Level	10-12, 30, 31	
Length	2.5 credits	
Certification:		
8417100 Health Careers 1		ANY HEALTH OCCUP ED G
8417110 Health Careers 2		ANY HEALTH OCCUP ED G
8417191 Home Health Aide 3 95-96		PRAC NURSE @7 @G REG NURSE G NURSING ED @5
Facility Code:	252	
Basic Skills	N/A	
Math		
Language		
Reading		

MAJOR CONCEPTS/CONTENT: The three courses in this program are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)
8417191 - Home Health Aide 3 95-96 (one-half credit)

This program is designed to prepare students for employment as home attendants or home health aides (66011462), nursing aides and orderlies (66008439), (354.377-014).

The content includes, but is not limited to, instruction in those supportive services that are required to provide and maintain bodily and emotional comfort and to assist the patient toward independent living in a safe environment, as stated in Rules of the Department of Health and Rehabilitative Services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies. Clinical experiences, where the student may practice, demonstrate and perform the procedures associated with bedside client care, are an appropriate part of this program.

Section 10D 68.014 Home Health Aide, Administrative Rules, Department of Health and Rehabilitative Services contain much valuable information for program planning. These rules require that if the Home Health Aide receives training through a vocational school where professional standards have been established in accordance with the State Board of Education, a certificate of successful completion shall be on file with the employer.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Students who have completed this program and the secondary program Nursing Assistant have met competencies for and may be known as Patient Care Assistants. This program may be taken simultaneously with Nursing Assistant.

INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A (01.0 - 28.0)
HOME HEALTH AIDE - OES Code 66011462

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Use verbal and written communications.
18.0 Demonstrate legal and ethical responsibilities.
19.0 Perform physical comfort and safety functions.
20.0 Provide personal patient care.
21.0 Perform nursing procedures.
22.0 Apply principles of nutrition.
23.0 Provide care for geriatric patients.
24.0 Apply the principles of infection control.
25.0 Provide bio-psycho-social support

26.0 Perform supervised management functions, following the patient plan of care.
27.0 Assist with rehabilitative activities.
28.0 Perform home health-care services.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Home Health Aide 95-96
Secondary Number:	8417190
Postsecondary Number:	

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.04 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.

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12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

16.09 Calculate ratios.

17.0 USE VERBAL AND WRITTEN COMMUNICATIONS--The student will be able to:

17.01 Obtain specified data from patient and family.

17.02 Utilize verbal and written information to assist with the patient's plan of care.

18.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

18.01 Demonstrate legal and ethical behavior within the role and scope of home health aide responsibilities.

18.02 Follow policies and procedures affecting the health, safety, and well-being of patients in the home setting.

18.03 Recognize and report signs of substance abuse.

18.04 Follow legal guidelines in charting.

18.05 Exhibit behavior supporting and promoting residents' rights.

19.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS--The student will be able to:

19.01 Maintain patient units in the home.

19.02 Adjust bed and siderails.

19.03 Transfer patient, using mechanical lifters.

19.04 Turn and position patient.

19.05 Apply protective devices as directed (e.g. vest or belt).

19.06 Apply comfort devices as directed (e.g. footboard, overbed cradle, alternating pressure mattress).

19.07 Assist patient to dangle.

19.08 Assist patient in ambulation, including the use of crutch, cane, or walker.

19.09 Assist patient in using wheelchair.

19.10 Assist patient with care and use of prosthetic/orthotic devices.

19.11 Administer back rub.

19.12 Identify emergency evaculation procedures with adaptations to the home setting.

20.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

20.01 Give bed bath.

20.02 Assist with shower or tub bath, including use of specialty tubs.

20.03 Assist patient with sink, tub, shower, or bed shampoo.

20.04 Shave patient.

20.05 Groom patient, including hair, skin, foot, and nail care.

20.06 Assist with and/or administer oral hygiene.

20.07 Assist patient with toileting.

20.08 Assist patient to dress.

20.09 Assist patient with meals.

21.0 PERFORM NURSING PROCEDURES--The student will be able to:

21.01 Make unoccupied/occupied bed.
21.02 Assist patient in passive range-of-motion exercises.
21.03 Apply anti-embolic hose.
21.04 Collect, strain, and/or test routine urine specimen.
21.05 Monitor catheter drainage system.
21.06 Monitor fluid intake and output (I&O), including forcing and restricting fluids.
21.07 Observe, record, and report patient's emesis.
21.08 Assist patient with sitz bath.
21.09 Assist with ostomy care.
21.10 Collect stool specimen.
21.11 Care for patients receiving oxygen therapy.

22.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

22.01 Identify nutrients and food groups.
22.02 Explain regional, cultural, and religious food preferences.
22.03 Describe special diets.
22.04 List factors that must be considered when purchasing food.
22.05 Prepare a basic food plan.
22.06 List factors that must be considered when storing food.
22.07 Identify methods of maintaining fluid balance.
22.08 Identify methods of food preparation.
22.09 Discuss preparation and serving of trays in the home.

23.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

23.01 Identify safety principles, as related to the elderly.
23.02 Describe general characteristics, particular needs, and problems of the elderly.
23.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
23.04 Distinguish between fact and fallacy about the aging process.
23.05 Identify community resources and services available to the elderly.
23.06 Apply Reality Orientation Techniques and Validation Therapy.
23.07 Provide and involve patients in diversional activities.
23.08 Identify common alterations in elderly patient behavior.
23.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

24.0 APPLY THE PRINCIPLES OF INFECTION CONTROL--The student will be able to:

24.01 Provide care for patients with infectious diseases in the home.
24.02 Follow isolation procedures with food tray, garments, and other materials in the home.
24.03 Utilize universal precautions in all home care.

25.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT--The student will be able to:

25.01 Discuss family roles and their significance to health.

25.02 Respond to patient and family emotional needs.

26.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

26.01 Organize patient-care assignments.
26.02 Complete assignments accurately and in a timely manner.

27.0 ASSIST WITH REHABILITATIVE ACTIVITIES--The student will be able to:

27.01 List the purposes of restorative (rehabilitation) programs.
27.02 Assist patient with specified restorative (rehabilitation) needs.
27.03 Assist patients/residents to reach the optimum level of independence.

28.0 PERFORM HOME HEALTH-CARE SERVICES--The student will be able to:

28.01 Follow an established work plan with the patient and family.
28.02 Perform patient-related cleaning tasks and laundry.
28.03 Identify methods for medication storage.
28.04 Assist patient with taking self-administered prescribed medication in the home.
28.05 Demonstrate how to improvise specified equipment and supplies in the home.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number:	8417100
Course Title:	Health Careers 1
Course Credit:	1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.

05.09 Identify current issues related to genetic research.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number:	8417110
Course Title:	Health Careers 2
Course Credit:	1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417191
Course Title: Home Health Aide 3 95-96
Course Credit: .5

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 USE VERBAL AND WRITTEN COMMUNICATIONS--The student will be able to:

17.01 Obtain specified data from patient and family.
17.02 Utilize verbal and written information to assist with the patient's plan of care.

18.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

18.01 Demonstrate legal and ethical behavior within the role and scope of home health aide responsibilities.
18.02 Follow policies and procedures affecting the health, safety, and well-being of patients in the home setting.
18.03 Recognize and report signs of substance abuse.
18.04 Follow legal guidelines in charting.
18.05 Exhibit behavior supporting and promoting residents' rights.

19.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS--The student will be able to:

19.01 Maintain patient units in the home.
19.02 Adjust bed and siderails.
19.03 Transfer patient, using mechanical lifters.
19.04 Turn and position patient.
19.05 Apply protective devices as directed (e.g. vest or belt).
19.06 Apply comfort devices as directed (e.g. footboard, overbed cradle, alternating pressure mattress).
19.07 Assist patient to dangle.
19.08 Assist patient in ambulation, including the use of crutch, cane, or walker.
19.09 Assist patient in using wheelchair.
19.10 Assist patient with care and use of prosthetic/orthotic devices.
19.11 Administer back rub.
19.12 Identify emergency evacuation procedures with adaptations to the home setting.

20.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

20.01 Give bed bath.

20.02 Assist with shower or tub bath, including use of specialty tubs.
20.03 Assist patient with sink, tub, shower, or bed shampoo.
20.04 Shave patient.
20.05 Groom patient, including hair, skin, foot, and nail care.
20.06 Assist with and/or administer oral hygiene.
20.07 Assist patient with toileting.
20.08 Assist patient to dress.
20.09 Assist patient with meals.

21.0 PERFORM NURSING PROCEDURES--The student will be able to:

21.01 Make unoccupied/occupied bed.
21.02 Assist patient in passive range-of-motion exercises.
21.03 Apply anti-embolic hose.
21.04 Collect, strain, and/or test routine urine specimen.
21.05 Monitor catheter drainage system.
21.06 Monitor fluid intake and output (I&O), including forcing and restricting fluids.
21.07 Observe, record, and report patient's emesis.
21.08 Assist patient with sitz bath.
21.09 Assist with ostomy care.
21.10 Collect stool specimen.
21.11 Care for patients receiving oxygen therapy.

22.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

22.01 Identify nutrients and food groups.
22.02 Explain regional, cultural, and religious food preferences.
22.03 Describe special diets.
22.04 List factors that must be considered when purchasing food.
22.05 Prepare a basic food plan.
22.06 List factors that must be considered when storing food.
22.07 Identify methods of maintaining fluid balance.
22.08 Identify methods of food preparation.
22.09 Discuss preparation and serving of trays in the home.

23.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

23.01 Identify safety principles, as related to the elderly.
23.02 Describe general characteristics, particular needs, and problems of the elderly.
23.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
23.04 Distinguish between fact and fallacy about the aging process.
23.05 Identify community resources and services available to the elderly.
23.06 Apply Reality Orientation Techniques and Validation Therapy.
23.07 Provide and involve patients in diversional activities.
23.08 Identify common alterations in elderly patient behavior.
23.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

24.0 APPLY THE PRINCIPLES OF INFECTION CONTROL--The student will be able to:

24.01 Provide care for patients with infectious diseases in the home.
24.02 Follow isolation procedures with food tray, garments, and other materials in the home.
24.03 Utilize universal precautions in all home care.

25.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT--The student will be able to:

25.01 Discuss family roles and their significance to health.
25.02 Respond to patient and family emotional needs.

26.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

26.01 Organize patient-care assignments.
26.02 Complete assignments accurately and in a timely manner.

27.0 ASSIST WITH REHABILITATIVE ACTIVITIES--The student will be able to:

27.01 List the purposes of restorative (rehabilitation) programs.
27.02 Assist patient with specified restorative (rehabilitation) needs.
27.03 Assist patients/residents to reach the optimum level of independence.

28.0 PERFORM HOME HEALTH-CARE SERVICES--The student will be able to:

28.01 Follow an established work plan with the patient and family.
28.02 Perform patient-related cleaning tasks and laundry.
28.03 Identify methods for medication storage.
28.04 Assist patient with taking self-administered prescribed medication in the home.
28.05 Demonstrate how to improvise specified equipment and supplies in the home.

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Florida Department of Education
INTENDED OUTCOMES

Program Title: Medical Laboratory Assisting 95-96

	Secondary	PSAV
Program Numbers	**8417200**	See Clinical Laboratory Cluster for PSAV information.
CIP Number	0317.030401	
Grade Level	10-12, 30, 31	
Length	4 credits	
Certification:		
8417100 Health Careers 1		ANY HEALTH OCCUP ED G
8417110 Health Careers 2		ANY HEALTH OCCUP ED G
8417201 Medical Laboratory Assisting 3 95-96		TEC MED !7 !G LAB ASST @7 G LAB TECH @7 G
8417202 Medical Laboratory Assisting 4 95-96		TEC MED !7 !G LAB ASST @7 G LAB TECH @7 G
Facility Code:	252	
Basic Skills	N/A	
Math		
Language		
Reading		

MAJOR CONCEPTS/CONTENT: The four courses in this program are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)
8417201 - Medical Laboratory Assisting 3 95-96 (one credit)
8417202 - Medical Laboratory Assisting 4 95-96 (one credit)

The program is designed to prepare students for employment as medical/clinical lab technicians (32905207), or medical laboratory aides.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Students completing the course Medical Laboratory Assisting 3 95-96 have also met the postsecondary requirements of phlebotomy except for clinical experiences involving venipuncture on actual patients.

Students completing the course Medical Laboratory Assisting 4 95-96 have also met the postsecondary requirements of Medical Lab Assisting except for some clinical experiences involving live work.

Simulation and clinical laboratory experiences are integrated with the didactic portion of this program. Clinical experience is defined as laboratory activities performed in the clinical setting under the supervision of a medical laboratory technician or technologist.

INTENDED OUTCOMES: After successfully completing this course, the student will be able to:

OCCUPATIONAL COMPLETION POINT - DATA CODE A **(01.0 - 27.0)**
MEDICAL LAB ASSISTANT - Industry Title

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Demonstrate accepted professional, communication, and interpersonal skills.
18.0 Discuss phlebotomy in relation to the health care setting.
19.0 Identify the anatomic structure and function of body systems in relation to services performed by phlebotomist.
20.0 Recognize and identify collection reagents, supplies, equipment and interfering chemical substances.
21.0 Demonstrate skills and knowledge necessary to perform phlebotomy.
22.0 Practice infection control following universal precautions.
23.0 Practice accepted procedures of transporting, accessioning and processing specimens.
24.0 Practice quality assurance and safety.

25.0 Perform clinical laboratory "waived tests" based on knowledge of microbiology, urinalysis, clinical chemistry, and hematology.
26.0 Perform venipuncture and skin punctures, prepare blood smears, label and process specimens.
27.0 Successfully complete learning experiences in the clinical setting.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Medical Laboratory Assisting 95-96
Secondary Number: 8417200
Postsecondary Number:

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence..
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.

12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:

17.01 Demonstrate the appropriate professional behavior of a phlebotomist.
17.02 Explain to the patient the procedure to be used in specimen collection.
17.03 Explain in detail the importance of identifying patients correctly when drawing blood.
17.04 Assist in explaining activities to patient.

18.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

18.01 List, classify and discuss various departments and services within the health care setting in which the phlebotomist must interact with to obtain laboratory specimens from patients.
18.02 Identify the major departments/sections with the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
18.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

19.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

19.01 Describe and define major body systems with emphasis on the circulatory system.
19.02 List and describe the main superficial veins used in performing venipunctures.
19.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).
19.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

20.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS, SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

20.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
20.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.
20.03 Identify and discuss proper use of supplies used in collecting microspecimens.
20.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.

20.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.
20.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.
20.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

21.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY--The student will be able to:

21.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.
21.02 Discuss/perform methods for facilitating capillary/venipuncture collection.
21.03 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.
21.04 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.
21.05 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and patient care.
21.06 Describe the correct order of draw during capillary and venipuncture.
21.07 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.
21.08 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.
21.09 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.
21.10 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation.

22.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS--The student will be able to:

22.01 Define the term "nosocomial infection."
22.02 Describe/practice procedures for infection prevention.
22.03 Discuss/perform isolation procedures.
22.04 Identify potential routes of infection.

23.0 PRACTICE ACCEPTED PROCEDURES OF TRANSPORTING, ACCESSIONING AND PROCESSING SPECIMENS--The student will be able to:

23.01 Describe routine procedures for transporting and processing specimens.
23.02 Describe the significance of time constraints for specimen collection and delivery.
23.03 Demonstrate knowledge of accessioning procedures.
23.04 Prepare aliquot(s) of specimen or component(s) for analysis according to specimen type and analysis to be performed.
23.05 Follow protocol for accepting verbal test orders.

24.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:

24.01 Distinguish and perform procedures which ensure reliability of test results when collecting blood specimens.
24.02 Demonstrate knowledge of and practice appropriate patient safety.
24.03 Practice laboratory safety in accordance with established procedures.
24.04 Follow documentation procedures for work related accidents.

25.0 PERFORM CLINICAL LABORATORY "WAIVED TESTS" BASED ON KNOWLEDGE OF MICROBIOLOGY, URINALYSIS, CLINICAL CHEMISTRY, AND HEMATOLOGY--The student will be able to:

25.01 Perform techniques of microbiology related to disinfection techniques.
25.02 Perform techniques of microbiology related to isolation techniques.
25.03 Perform techniques of microbiology related to sterilization techniques.
25.04 Perform techniques of microbiology related to preparation, staining and microscopic examination of gram stains.
25.05 Perform techniques of microbiology related to inoculation and transfer of cultures.
25.06 Perform basic techniques of microbiology
25.07 Perform techniques of microbiology related to preparation of artificial culture media.
25.08 Perform techniques of microbiology related to principles and use of the microscope.
25.09 Perform urinalysis techniques related to normal and abnormal components of the urine.
25.10 Perform urinalysis techniques related to collection and preservation of specimens.
25.11 Perform urinalysis techniques related to physical properties of urine and related odors, color.
25.12 Perform urinalysis techniques related to urine pH and describe clinical significance.
25.13 Perform urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometers and refractometers.
25.14 Perform urinalysis techniques related to performance of chemical tests.
25.15 Perform urinalysis techniques related to microscopic identification of significant elements.
25.16 Perform urinalysis techniques related to principles and use of centrifuge.
25.17 Perform techniques of clinical chemistry related to metric measurement.
25.18 Perform techniques of clinical chemistry related to laboratory glassware and equipment.
25.19 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.

25.20 Perform techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.
25.21 Perform techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.
25.22 Perform techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.
25.23 Perform basic techniques of clinical chemistry related to normal and abnormal physiology.
25.24 Perform techniques of hematology related to counting formed elements of blood.
25.25 Perform techniques of hematology related to preparation, staining and cell differential microscopic examination of blood films.
25.26 Perform techniques of hematology related to hematocrit tests.
25.27 Perform techniques of hematology related to bleeding and clotting times.
25.28 Perform techniques of hematology related to hemoglobin tests.
25.29 Perform techniques of hematology related to calculation of red blood cell indices.
25.30 Perform basic techniques of hematology related to normal and abnormal physiology.

26.0 PERFORM VENIPUNCTURES AND SKIN PUNCTURES, PREPARE BLOOD SMEARS, LABEL AND PROCESS SPECIMENS--The student will be able to:

26.01 Demonstrate knowledge of established protocol for patient and specimen identification.
26.02 Perform appropriate methods for decontaminating site for skin or venipuncture.
26.03 Perform venipunctures by evacuated tube and syringe systems.
26.04 Perform skin punctures.
26.05 Prepare blood smears.
26.06 Label and process specimens.

27.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING--The student will be able to:

27.01 Observe and participate as appropriate in skills outlined in outcomes for medical lab assisting.
27.02 Complete clinical rotations.

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STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.

05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417201
Course Title: Medical Laboratory Assisting 3 95-96
Course Credit: 1

This one credit course is the first course of a two course occupational completion point for Medical Lab Assistant. Live work is not recommended for this course. Students completing this course have also met the postsecondary requirements of phlebotomy except for clinical experiences with live work

17.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:

17.01 Demonstrate the appropriate professional behavior of a phlebotomist.
17.02 Explain to the patient the procedure to be used in specimen collection.
17.03 Explain in detail the importance of identifying patients correctly when drawing blood.
17.04 Assist in explaining activities to patient.

18.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

18.01 List, classify and discuss various departments and services within the health care setting in which the phlebotomist must interact with to obtain laboratory specimens from patients.
18.02 Identify the major departments/sections with the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
18.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

19.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

19.01 Describe and define major body systems with emphasis on the circulatory system.
19.02 List and describe the main superficial veins used in performing venipunctures.
19.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).
19.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

20.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS, SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

20.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
20.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.
20.03 Identify and discuss proper use of supplies used in collecting microspecimens.
20.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
20.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.
20.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.
20.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

21.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY--The student will be able to:

21.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.
21.02 Discuss/perform methods for facilitating capillary/venipuncture collection.
21.03 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.
21.04 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.
21.05 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and patient care.
21.06 Describe the correct order of draw during capillary and venipuncture.
21.07 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.
21.08 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.
21.09 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.
21.10 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation.

22.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS--The student will be able to:

22.01 Define the term "nosocomial infection."
22.02 Describe/practice procedures for infection prevention.
22.03 Discuss/perform isolation procedures.
22.04 Identify potential routes of infection.

23.0 PRACTICE ACCEPTED PROCEDURES OF TRANSPORTING, ACCESSIONING AND PROCESSING SPECIMENS--The student will be able to:

23.01 Describe routine procedures for transporting and processing specimens.
23.02 Describe the significance of time constraints for specimen collection and delivery.
23.03 Demonstrate knowledge of accessioning procedures.
23.04 Prepare aliquot(s) of specimen or component(s) for analysis according to specimen type and analysis to be performed.
23.05 Follow protocol for accepting verbal test orders.

24.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:

24.01 Distinguish and perform procedures which ensure reliability of test results when collecting blood specimens.
24.02 Demonstrate knowledge of and practice appropriate patient safety.
24.03 Practice laboratory safety in accordance with established procedures.
24.04 Follow documentation procedures for work related accidents.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417202
Course Title: Medical Laboratory Assisting 4 95-96
Course Credit: 1

This one credit course is the second course of a two course occupational completion point for Medical Lab Assistant. Students completing this course have also met the postsecondary requirements of Medical Lab Assisting except for clinical experiences involving live work.

25.0 PERFORM CLINICAL LABORATORY SKILLS BASED ON KNOWLEDGE OF MICROBIOLOGY, URINALYSIS, CLINICAL CHEMISTRY, AND HEMATOLOGY -- The student will be able to:

25.01 Perform techniques of microbiology related to disinfection techniques.
25.02 Perform techniques of microbiology related to isolation techniques.
25.03 Perform techniques of microbiology related to sterilization techniques.
25.04 Perform techniques of microbiology related to preparation, staining and microscopic examination of gram stains.
25.05 Perform techniques of microbiology related to inoculation and transfer of cultures.
25.06 Perform basic techniques of microbiology
25.07 Perform techniques of microbiology related to preparation of artificial culture media.
25.08 Perform techniques of microbiology related to principles and use of the microscope.
25.09 Perform urinalysis techniques related to normal and abnormal components of the urine.
25.10 Perform urinalysis techniques related to collection and preservation of specimens.
25.11 Perform urinalysis techniques related to physical properties of urine and related odors, color.
25.12 Perform urinalysis techniques related to urine pH and describe clinical significance.
25.13 Perform urinalysis techniques related to urine specific gravity techniques; calibration and use of urinometers and refractometers.
25.14 Perform urinalysis techniques related to performance of chemical tests.
25.15 Perform urinalysis techniques related to microscopic identification of significant elements.
25.16 Perform urinalysis techniques related to principles and use of centrifuge.
25.17 Perform techniques of clinical chemistry related to metric measurement.

25.18 Perform techniques of clinical chemistry related to laboratory glassware and equipment.
25.19 Perform techniques of clinical chemistry related to reagent preparation, laboratory equipment and laboratory techniques.
25.20 Perform techniques of clinical chemistry related to preparation of protein free filtrate and chemical tests.
25.21 Perform techniques of clinical chemistry related to standardization of procedure and use of standards, blanks and controls.
25.22 Perform techniques of clinical chemistry related to visual colorimetry; calibration and use of the spectrophotometer.
25.23 Perform basic techniques of clinical chemistry related to normal and abnormal physiology.
25.24 Perform techniques of hematology related to counting formed elements of blood.
25.25 Perform techniques of hematology related to preparation, staining and cell differential microscopic examination of blood films.
25.26 Perform techniques of hematology related to hematocrit tests.
25.27 Perform techniques of hematology related to bleeding and clotting times.
25.28 Perform techniques of hematology related to hemoglobin tests.
25.29 Perform techniques of hematology related to calculation of red blood cell indices.
25.30 Perform basic techniques of hematology related to normal and abnormal physiology.

26.0 PERFORM VENIPUNCTURES AND SKIN PUNCTURES, PREPARE BLOOD SMEARS, LABEL AND PROCESS SPECIMENS--The student will be able to:

26.01 Demonstrate knowledge of established protocol for patient and specimen identification.
26.02 Perform appropriate methods for decontaminating site for skin or venipuncture.
26.03 Perform venipunctures by evacuated tube and syringe systems.
26.04 Perform skin punctures.
26.05 Prepare blood smears.
26.06 Label and process specimens.

27.0 SUCCESSFULLY COMPLETE LEARNING EXPERIENCES IN THE CLINICAL SETTING--The student will be able to:

27.01 Observe and participate as appropriate in skills outlined in outcomes for medical lab assisting.
27.02 Complete clinical rotations.

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Florida Department of Education
INTENDED OUTCOMES

Program Title: Nursing Assistant 95-96

	Secondary	
Program Numbers	**8417210**	
CIP Number	0317.060201	
Grade Level	10-12, 30, 31	
Length	3 credits	
Certification:		
8417100 Health Careers 1		ANY HEALTH OCCUP ED G
8417110 Health Careers 2		ANY HEALTH OCCUP ED G
8417211 Nursing Assistant 3 95-96		PRAC NURSE @7 @G NURSING ED @5 REG NURSE G
Facility Code:	252	
Basic Skills	N/A	
Math		
Language		
Reading		

MAJOR CONCEPTS/CONTENT: The three courses in this program are:
8417100 Health Careers 1 (one credit)
8417110 Health Careers 2 (one credit)
8417211 Nursing Assistant 3 95-96 (one credit)

This course is designed to prepare students for employment as nursing assistants (66008445), (355.674-014), nurse aides, in nursing homes, hospitals, or other health care facilities.

Successful completion of this program from an approved school prepares the student for certification for employment as a Nursing Assistant in a nursing home, in accordance with Chapter 82-163, Florida Statutes. To be approved, the course must be taught by a registered nurse. Those students who satisfactorily complete an approved course are eligible to take the national nursing assistant examination being utilized in Florida, in accoardance with Chapter 82-163, F.S. Nursing assistants do not need to be certified except to work in nursing homes unless it is a condition for employment in other institutions.

Students will perform nursing skills in the clinical and/or simulated laboratory settings under the supervision of a qualified registered nurse instructor. The recommended teacher/student ratio in the clinical area is 1 to 12. Clinical and simulated laboratory learning experiences must correlate with didactic instruction. For nursing assistant certification a minimum of 40 hours clinical and/or cooperative education learning experiences must be obtained. Twenty hours of this clinical experience must be in a licensed nursing home. **PERSONS WHO ARE ENROLLED IN A STATE APPROVED NURSING ASSISTANT TRAINING PROGRAM, APPROVED BY THE DEPARTMENT OF EDUCATION, MAY BE EMPLOYED BY A LICENSED NURSING HOME FOR A PERIOD OF FOUR MONTHS. THE CERTIFICATION**

REQUIREMENTS MUST BE MET WITHIN FOUR MONTHS OF SUCH INITIAL EMPLOYMENT, HOWEVER.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Students completing this program and the course Home Health Aide 3 95-96 have met the requirements for and may be known as a Patient Care Assistant.

INTENDED OUTCOMES:

OCCUPATIONAL COMPLETION POINT - DATA CODE A
NURSING ASSISTANT - OES Code 66008445

After successfully completing this course the student will be able to:

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Use verbal and written communications specific to nurse assisting.

18.0 Demonstrate legal and ethical responsibilities specific to nurse assisting.

19.0 Perform physical comfort and safety functions specific to nurse assisting.

20.0 Provide personal patient care.

21.0 Perform nursing procedures.

22.0 Apply principles of nutrition.

23.0 Provide care for geriatric patients.

24.0 Apply the principles of infection control specific to nursing assisting.

25.0 Provide biological, psychosocial, and social support.

26.0 Perform supervised management functions, following the patient plan of care.

27.0 Assist with restorative (rehabilitative) activities.

28.0 Perform skills related to the hospital setting.

29.0 Provide care for the adult patient.

30.0 Demonstrate knowledge and understanding for needs of patients with specific health problems.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Nursing Assistant 95-96
Secondary Number: 8417210
Postsecondary Number:

The student completing this course will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resurces to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
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09.07 Explain the nutrition pyramid.

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10.01 Demonstrate the safe use of medical equipment.
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10.05 Demonstrate the procedure for properly identifying patients.
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12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

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14.11 Write an appropriate resume.

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15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
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16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 USE VERBAL AND WRITTEN COMMUNICATIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

17.01 Obtain specified data from patient and family.
17.02 Utilize verbal and written information to assist with the patient's plan of care.
17.03 Demonstrate use of the intercom.

18.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO NURSE ASSISTING--The student will be able to:

18.01 Demonstrate legal and ethical behavior within the role and scope of nursing assistant responsibilities.
18.02 Describe the purpose of the chain of command (i.e.,to resolve patient or employee problems).
18.03 Follow policies and procedures affecting the health, safety, and well-being of patients.
18.04 Recognize and report signs of substance abuse.
18.05 Follow legal guidelines in charting.
18.06 Exhibit behavior supporting and promoting residents' rights.

19.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

19.01 Maintain patient units and equipment.
19.02 Maintain service areas on the units including supplies and equipment.
19.03 Observe, report, and note changes in the patient's behavior daily, including mental awareness.
19.04 Adjust bed and siderails.
19.05 Lift, hold, and transfer patients including the use of the mechanical lift, utilizing good body mechancis.
19.06 Turn and position patient.
19.07 Apply protective devices as directed (e.g., vest and belt).
19.08 Apply comfort devices as directed (e.g., footboard, overbed cradle, alternating pressure mattress).
19.09 Assist patient to dangle.
19.10 Assist patient in ambulation, including the use of crutch, cane, or walker.
19.11 Assist patient in using wheelchair.
19.12 Assist patient with care and use of prosthetic/orthotic devices.
19.13 Administer back rub.
19.14 Describe emergency procedures utilized in the clinical area(s).

20.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

20.01 Give bed bath.

20.02 Assist with shower or tub bath, including the use of specialty tubs.
20.03 Assist patient with sink, tub, shower, or bed shampoo.
20.04 Shave patient.
20.05 Groom patient, including hair, skin, foot, and nail care.
20.06 Assist with and/or administer oral hygiene.
20.07 Assist patient with toileting.
20.08 Assist patient to dress.
20.09 Assist patient with meals.
20.10 Provide bowel and bladder training.
20.11 Give perineal care.
20.12 Empty urinary drainage.

21.0 PERFORM NURSING PROCEDURES--The student will be able to:

21.01 Admit patient.
21.02 Transfer patient.
21.03 Discharge patient.
21.04 Make unoccupied/occupied bed.
21.05 Measure and record patient's height and weight.
21.06 Assist patient in passive range-of-motion exercises.
21.07 Apply anti-embolic hose.
21.08 Collect, strain, and/or test routine urine specimen.
21.09 Collect timed urine specimen.
21.10 Monitor catheter drainage system.
21.11 Collect clean-catch (midstream-voided) urine specimen.
21.12 Monitor fluid intake and output (I&O), including forcing and restricting fluids.
21.13 Observe, record, and report patient's emesis.
21.14 Assist patient with sitz bath.
21.15 Monitor and assist with care of catheters.
21.16 Assist with ostomy care.
21.17 Collect stool specimen.
21.18 Perform postmortem care.
21.19 Maintain patient-belongings list.
21.20 Administer prepackaged enema of five ounces or less.
21.21 Care for patients with nasal, gastrostomy, and/or intravenous tubes.
21.22 Collect sputum specimen.

22.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

22.01 Identify nutrients and food groups.
22.02 Explain regional, cultural, and religious food preferences.
22.03 Describe special diets.
22.04 Prepare a basic food plan.
22.05 Check patient's diet tray for accuracy.
22.06 Identify methods of maintaining fluid balance.

23.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

23.01 Identify safety principles as related to the elderly.
23.02 Describe general characteristics, particular needs, and problems of the elderly.

23.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
23.04 Distinguish between fact and fallacy about the aging process.
23.05 Identify community resources and services available to the elderly.
23.06 Apply Reality Orientation Techniques and Validation Therapy.
23.07 Provide and involve patients in diversional activities.
23.08 Identify common alterations in elderly patient behavior.
23.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

24.0 APPLY THE PRINCIPLES OF INFECTION CONTROL SPECIFIC TO NURSING ASSISTING--The student will be able to:

24.01 Provide care for patients with infectious diseases applying the principles of "Universal Precautions" utilized with all patients as well as special procedures required.
24.02 Set up isolation unit.
24.03 Follow isolation procedure with food tray, garments, and other materials.
24.04 Collect specimen from patient in isolation.

25.0 PROVIDE BIOLOGIAL, PSYCHOLOCIAL, AND SOCIAL SUPPORT--The student will be able to:

25.01 Discuss family roles and their significance to health.
25.02 Respond to patient and family emotional needs.

26.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

26.01 Organize patient-care assignments.
26.02 Complete assignments accurately and in a timely manner.

27.0 ASSIST WITH RESTORATIVE (REHABILITATIVE) ACTIVITIES--The student will be able to:

27.01 List the purposes of restorative (rehabilitation) program.
27.02 Assist patient with specified restorative (rehabilitation) needs.
27.03 Assist patients/residents to reach the optimum level of independence.

28.0 PERFORM SKILLS RELATED TO THE HOSPITAL SETTING--The student will be able to:

28.01 Care for hospital equipment and supplies.
28.02 Transfer patient to stretcher.
28.03 Prepare hot and cold applications and assist nurse to apply them.
28.04 Assist patient to apply binders.
28.05 Care for patient in skin and skeletal traction.
28.06 Assist with pre-operative and post-operative patient care.
28.07 Reinforce dressings.

28.08 Practice nursing procedures from the nursing assistant module in hospital setting.

29.0 PROVIDE CARE FOR THE ADULT PATIENT--The student will be able to:

29.01 Insert a rectal tube.
29.02 Assist with physical examination.
29.03 Care for patients receiving oxygen therapy.
29.04 Change an unsterile dressing.
29.05 Take an apical pulse.
29.06 Take an apical-radial pulse.
29.07 Take pedal pulse.
29.08 Give cast care.
29.09 Give artificial eye/contact lens care.

30.0 DEMONSTRATE KNOWLEDGE AND UNDERSTANDING FOR NEEDS OF PATIENT WITH SPECIFIC HEALTH PROBLEMS--The student will be able to:

30.01 Assist a patient having a seizure.
30.02 Assist patients with spinal cord injuries.
30.03 Assist patients with arthritis.
30.04 Assist patients with diabetes.
30.05 Assist the blind patient with basic needs.
30.06 Assist in caring for patients with blood borne diseases.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.

05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.

16.02 Measure time, temperature, distance, capacity, and mass/weight.

16.03 Make and use measurements in both traditional and metric units.

16.04 Make estimates and approximations and judge the reasonableness of the result.

16.05 Convert from regular to 24 hour time.

16.06 Demonstrate ability to evaluate and draw conclusions.

16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

16.09 Calculate ratios.

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STUDENT PERFORMANCE STANDARDS

Course Number:	8417211
Course Title:	Nursing Assistant 3 95-96
Course Credit:	1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 USE VERBAL AND WRITTEN COMMUNICATIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

17.01 Obtain specified data from patient and family.
17.02 Utilize verbal and written information to assist with the patient's plan of care.
17.03 Demonstrate use of the intercom.

18.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO NURSE ASSISTING--The student will be able to:

18.01 Demonstrate legal and ethical behavior within the role and scope of nursing assistant responsibilities.
18.02 Describe the purpose of the chain of command (i.e.,to resolve patient or employee problems).
18.03 Follow policies and procedures affecting the health, safety, and well-being of patients.
18.04 Recognize and report signs of substance abuse.
18.05 Follow legal guidelines in charting.
18.06 Exhibit behavior supporting and promoting residents' rights.

19.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

19.01 Maintain patient units and equipment.
19.02 Maintain service areas on the units including supplies and equipment.
19.03 Observe, report, and note changes in the patient's behavior daily, including mental awareness.
19.04 Adjust bed and siderails.
19.05 Lift, hold, and transfer patients including the use of the mechanical lift, utilizing good body mechancis.
19.06 Turn and position patient.
19.07 Apply protective devices as directed (e.g., vest and belt).
19.08 Apply comfort devices as directed (e.g., footboard, overbed cradle, alternating pressure mattress).
19.09 Assist patient to dangle.
19.10 Assist patient in ambulation, including the use of crutch, cane, or walker.
19.11 Assist patient in using wheelchair.

19.12 Assist patient with care and use of prosthetic/orthotic devices.
19.13 Administer back rub.
19.14 Describe emergency procedures utilized in the clinical area(s).

20.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

20.01 Give bed bath.
20.02 Assist with shower or tub bath, including the use of specialty tubs.
20.03 Assist patient with sink, tub, shower, or bed shampoo.
20.04 Shave patient.
20.05 Groom patient, including hair, skin, foot, and nail care.
20.06 Assist with and/or administer oral hygiene.
20.07 Assist patient with toileting.
20.08 Assist patient to dress.
20.09 Assist patient with meals.
20.10 Provide bowel and bladder training.
20.11 Give perineal care.
20.12 Empty urinary drainage.

21.0 PERFORM NURSING PROCEDURES--The student will be able to:

21.01 Admit patient.
21.02 Transfer patient.
21.03 Discharge patient.
21.04 Make unoccupied/occupied bed.
21.05 Measure and record patient's height and weight.
21.06 Assist patient in passive range-of-motion exercises.
21.07 Apply anti-embolic hose.
21.08 Collect, strain, and/or test routine urine specimen.
21.09 Collect timed urine specimen.
21.10 Monitor catheter drainage system.
21.11 Collect clean-catch (midstream-voided) urine specimen.
21.12 Monitor fluid intake and output (I&O), including forcing and restricting fluids.
21.13 Observe, record, and report patient's emesis.
21.14 Assist patient with sitz bath.
21.15 Monitor and assist with care of catheters.
21.16 Assist with ostomy care.
21.17 Collect stool specimen.
21.18 Perform postmortem care.
21.19 Maintain patient-belongings list.
21.20 Administer prepackaged enema of five ounces or less.
21.21 Care for patients with nasal, gastrostomy, and/or intravenoustubes.
21.22 Collect sputum specimen.

22.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

22.01 Identify nutrients and food groups.
22.02 Explain regional, cultural, and religious food preferences.
22.03 Describe special diets.
22.04 Prepare a basic food plan.

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22.05 Check patient's diet tray for accuracy.
22.06 Identify methods of maintaining fluid balance.

23.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

23.01 Identify safety principles as related to the elderly.
23.02 Describe general characteristics, particular needs, and problems of the elderly.
23.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
23.04 Distinguish between fact and fallacy about the aging process.
23.05 Identify community resources and services available to the elderly.
23.06 Apply Reality Orientation Techniques and Validation Therapy.
23.07 Provide and involve patients in diversional activities.
23.08 Identify common alterations in elderly patient behavior.
23.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

24.0 APPLY THE PRINCIPLES OF INFECTION CONTROL SPECIFIC TO NURSING ASSISTING--The student will be able to:

24.01 Provide care for patients with infectious diseases applying the principles of "Universal Precautions" utilized with all patients as well as special procedures required.
24.02 Set up isolation unit.
24.03 Follow isolation procedure with food tray, garments, and other materials.
24.04 Collect specimen from patient in isolation.

25.0 PROVIDE BIOLOGIAL, PSYCHOLOCIAL, AND SOCIAL SUPPORT--The student will be able to:

25.01 Discuss family roles and their significance to health.
25.02 Respond to patient and family emotional needs.

26.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

26.01 Organize patient-care assignments.
26.02 Complete assignments accurately and in a timely manner.

27.0 ASSIST WITH RESTORATIVE (REHABILITATIVE) ACTIVITIES--The student will be able to:

27.01 List the purposes of restorative (rehabilitation) program.
27.02 Assist patient with specified restorative (rehabilitation) needs.
27.03 Assist patients/residents to reach the optimum level of independence.

28.0 PERFORM SKILLS RELATED TO THE HOSPITAL SETTING--The student will be able to:

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28.01 Care for hospital equipment and supplies.
28.02 Transfer patient to stretcher.
28.03 Prepare hot and cold applications and assist nurse to apply them.
28.04 Assist patient to apply binders.
28.05 Care for patient in skin and skeletal traction.
28.06 Assist with pre-operative and post-operative patient care.
28.07 Reinforce dressings.
28.08 Practice nursing procedures from the nursing assistant module in hospital setting.

29.0 PROVIDE CARE FOR THE ADULT PATIENT--The student will be able to:

29.01 Insert a rectal tube.
29.02 Assist with physical examination.
29.03 Care for patients receiving oxygen therapy.
29.04 Change an unsterile dressing.
29.05 Take an apical pulse.
29.06 Take an apical-radial pulse.
29.07 Take pedal pulse.
29.08 Give cast care.
29.09 Give artificial eye/contact lens care.

30.0 DEMONSTRATE KNOWLEDGE AND UNDERSTANDING FOR NEEDS OF PATIENTS WITH SPECIFIC HEALTH PROBLEMS--The student will be able to:

30.01 Assist a patient having a seizure.
30.02 Assist patients with spinal cord injuries.
30.03 Assist patients with arthritis.
30.04 Assist patients with diabetes.
30.05 Assist the blind patient with basic needs.
30.06 Assist a patient with AIDS.

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INTENDED OUTCOMES

Program Title: Vision Care Assisting 95-96

	Secondary
Program Numbers	**8417230**
CIP Number	0317.070202
Grade Level	10-12, 30, 31
Length	4 credits
Certification:	

8417100 Health Careers 1	ANY HEALTH OCCUP ED G
8417110 Health Careers 2	ANY HEALTH OCCUP ED G
8417231 Vision Care Assisting 3 95-96	TEC OPTICS @7 G
8417232 Vision Care Assisting 4 95-96	TEC OPTICS @7 G

Facility Code:	252
Basic Skills	N/A
Math	
Language	
Reading	

MAJOR CONCEPTS/CONTENT: The four courses in this program are:

8417100 Health Careers 1 (one credit)
8417110 Health Careers 2 (one credit)
8417231 Vision Care Assisting 3 95-96 (one credit)
8417232 Vision Care Assisting 4 95-96 (one credit)

This program is designed to prepare students for employment at the aide level to assist opticians: dispensing and measuring (32514216), (079.364-014), lens grinders, and other trained workers in the field of optics. Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

The core of basic knowledge consists of two courses. Students must complete or be concurrently enrolled in the core courses before enrolling in a course leading to an occupational completion point. Students completing the Health Careers Core will not be required to repeat the core in secondary or postsecondary. To achieve an occupational completion point the student must complete at least one program in this cluster. The two courses in the core are:

8417100 - Health Careers 1 (one credit)
8417110 - Health Careers 2 (one credit)

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirement as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

INTENDED OUTCOMES:

OCCUPATIONAL COMPLETION POINT - DATA CODE A
VISION CARE ASSISTANT - Industry Title

After completing this course students will be able to:

01.0 Discuss and describe an overview of the human body, including organization and chemical processes.
02.0 Use correct medical terminology relating to body structure and function.
03.0 Identify cells and tissues microscopically and macroscopically and relate their specialized functions.
04.0 Identify and discuss the structure and function of the body systems in health and disease.
05.0 Identify and explain factors relating to the transmission of disease.
06.0 Demonstrate knowledge of the health care delivery system and health occupations.
07.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
08.0 Demonstrate legal and ethical responsibilities.
09.0 Demonstrate an understanding of and apply wellness and disease concepts.
10.0 Recognize and practice safety and security procedures.
11.0 Recognize and respond to emergency situations.
12.0 Recognize and practice infection control procedures.
13.0 Demonstrate computer literacy.
14.0 Demonstrate employability skills.
15.0 Demonstrate knowledge of blood borne diseases, including AIDS.
16.0 Apply basic math and science skills.
17.0 Complete frame and patient measurements.
18.0 Demonstrate knowledge of lens theory.
19.0 Grind and polish a glass lens to given specifications
20.0 Edge, tint and inspect a pair of glass or plastic lenses and insert into a frame.
21.0 Demonstrate knowledge of frame selection techniques used in a dispensing office setting.
22.0 Demonstrate knowledge of frame adjustment and alignment.
23.0 Recognize patient needs in relation to lens characteristics
24.0 Complete a case history.
25.0 Prepare patients for and assist in testing for eye disorders.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Area: Health Science Education
Cluster Title: Health Careers
Program Title: Vision Care Assisting 95-96
Secondary Number: 8417230

The student completing this program will be able to perform the following intended outcomes and student performance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

01.01 Define cells, tissues, organs, and systems.
01.02 Identify body cavities and the organs they contain.
01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

03.01 Describe cell structure and function in healthy tissue.
03.02 Describe cell structure and function in diseased tissue.
03.03 List the four main types of tissue.
03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

04.01 Describe the structure and function of each body system.
04.02 Identify common diseases in each body system.
04.03 Identify health careers related to each system.
04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

05.01 List and explain direct causes of disease.
05.02 List and explain indirect causes of disease.
05.03 Explain the chain of transmission.
05.04 Discuss the immune system.
05.05 Define and explain homeostasis.
05.06 List and discuss the body's defense mechanisms.
05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.
05.09 Identify current issues related to genetic research.

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupation.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.

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08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.
11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.

12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.

16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

17.0 COMPLETE FRAME AND PATIENT MEASUREMENTS--The student will be able to:

17.01 Identify different frame and temple types.
17.02 Complete patient prescription calculations.
17.03 Measure the frame PD and the eye Pupillary Distance.
17.04 Make estimates and approximations and judge the reasonableness of the result in making stock selections.

18.0 DEMONSTRATE KNOWLEDGE OF LENS THEORY--The student will be able to:

18.01 Demonstrate knowledge of optical measurement.
18.02 Demonstrate knowledge of light refraction and the physics of glass.
18.03 Use appropriate optical terminology and abbreviations.
18.04 Demonstrate knowledge of the anatomy and physiology of the eye and the disorders affecting vision.
18.05 Give and receive patient orders over the phone.

19.0 GRIND AND POLISH A GLASS LENS TO GIVEN SPECIFICATIONS--The student will be able to:

19.01 Layout and block a cylindrical and spherical lens.
19.02 Remove required amount of glass as specified from cylindrical and spherical lens.
19.03 Cut concave and convex cylinder to given specification.
19.04 Finish and polish a glass lens to given specifications.

20.0 EDGE, TINT AND INSPECT A PAIR OF GLASS OR PLASTIC LENSES AND INSERT INTO A FRAME--The student will be able to:

20.01 Edge and bevel a lens.
20.02 Heat treat a lens.
20.03 Check a lens for safety.
20.04 Insert lens into a frame.
20.05 Demonstrate knowledge of frame repair.
20.06 Demonstrate knowledge of lens tinting.
20.07 Inspect completed spectacles.

21.0 DEMONSTRATE KNOWLEDGE OF FRAME SELECTION TECHNIQUES USED IN A DISPENSING OFFICE SETTING--The student will be able to:

21.01 Identify frame parts and materials.
21.02 Demonstrate knowledge of frame measurement.
21.03 Demonstrate pupillary distance measurement.
21.04 Demonstrate frame selection considering customer and frame characteristics.

22.0 DEMONSTRATE KNOWLEDGE OF FRAME ADJUSTMENT AND ALIGNMENT--The student will be able to:

22.01 Select correct frame and bridge size.
22.02 Verify prescription information.
22.03 Insert lenses in zyl, optyl, and nylon frames.
22.04 Perform frame adjustment and alignment.
22.05 Perform frame repairs.

23.0 RECOGNIZE PATIENT NEEDS IN RELATION TO LENS CHARACTERISTICS--The student will be able to:

23.01 Identify the effects of types of lights on glass lenses.
23.02 Describe the effects of types of tint on the eye.
23.03 Identify types of glass coatings.
23.23. Identify the effects of the optical prism on lenses.
23.05 Define prism imbalance, vertical imbalance and full imbalance.
23.06 Identify occupational eyewear and special purpose frames.

24.0 COMPLETE A CASE HISTORY--The student will be able to:

24.01 Record the patient's chief complaints.
24.02 Record the patient's medical and ocular history.
24.03 Record the family's medical and ocular history.
24.23. Record the social history.

25.0 PREPARE PATIENTS FOR AND ASSIST IN TESTING FOR EYE DISORDERS--The student will be able to:

25.01 Define myopia, hyperopia, astigmatism, and ametropia.
25.02 Perform visual acuity screening and record results.
25.03 Demonstrate knowledge of selected instruments used in determining specific eye disorders.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417100
Course Title: Health Careers 1
Course Credit: 1

The students completing this course will be able to perform the following intended outcomes and student perfromance standards:

01.0 DISCUSS AND DESCRIBE AN OVERVIEW OF THE HUMAN BODY, INCLUDING ORGANIZATION AND CHEMICAL PROCESSES--The student will be able to:

- 01.01 Define cells, tissues, organs, and systems.
- 01.02 Identify body cavities and the organs they contain.
- 01.03 Define the chemical processes that maintain life.

02.0 USE CORRECT MEDICAL TERMINOLOGY RELATING TO BODY STRUCTURE AND FUNCTION--The student will be able to:

- 02.01 Use anatomical terminology to describe location of parts or areas of the body or to describe the relation of one part to another.
- 02.02 Use correct medical terminology, including prefixes and suffixes, to indicate anatomical structures.

03.0 IDENTIFY CELLS AND TISSUES MICROSCOPICALLY AND MACROSCOPICALLY AND RELATE THEIR SPECIALIZED FUNCTIONS--The student will be able to:

- 03.01 Describe cell structure and function in healthy tissue.
- 03.02 Describe cell structure and function in diseased tissue.
- 03.03 List the four main types of tissue.
- 03.04 Define the location and function of tissues.

04.0 IDENTIFY AND DISCUSS THE STRUCTURE AND FUNCTION OF THE BODY SYSTEMS IN RELATION TO HEALTH AND DISEASE--The student will be able to:

- 04.01 Describe the structure and function of each body system.
- 04.02 Identify common diseases in each body system.
- 04.03 Identify health careers related to each system.
- 04.03 Perform skills related to specific body systems.

05.0 IDENTIFY AND EXPLAIN FACTORS RELATING TO THE TRANSMISSION OF DISEASE--The student will be able to:

- 05.01 List and explain direct causes of disease.
- 05.02 List and explain indirect causes of disease.
- 05.03 Explain the chain of transmission.
- 05.04 Discuss the immune system.
- 05.05 Define and explain homeostasis.
- 05.06 List and discuss the body's defense mechanisms.
- 05.07 Describe DNA and its role in human heredity.

05.08 Describe the role of human genetics in relation to genetic diseases.

05.09 Identify current issues related to genetic research.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417110
Course Title: Health Careers 2
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

06.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

06.01 Identify the basic components of the health care delivery system.
06.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
06.03 Describe the composition and functions of a health care team.
06.04 Identify the general roles and responsibilities of the individual members of the health care team.
06.05 Develop a basic understanding of human needs throughout the lifespan.
06.06 Explain the importance of maintaining professional competence through continuing education.
06.07 Describe trends affecting the delivery system of health care.

07.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

07.01 Develop basic listening skills.
07.02 Develop basic observational skills and related documentation strategies in written and oral form.
07.03 Identify characteristics of successful and unsuccessful communication including barriers.
07.04 Respond to verbal and non-verbal cues.
07.05 Compose written communication using correct spelling, grammar, and format.
07.06 Use appropriate medical terminology and abbreviations.
07.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
07.08 Recognize the importance of patient/client education regarding health care.
07.09 Adapt communication skills to varied levels of understanding and cultural orientation.
07.10 Demonstrate telephone usage including taking messages.
07.11 Demonstrate ability to give and follow directions.
07.12 Distinguish between factual reports and personal opinion.

08.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

08.01 Discuss the legal framework of the health care occupations.
08.02 Explain the medical liability of health care workers.
08.03 Explain the patients' "Bill of Rights."
08.04 Describe a Code of Ethics consistent with the health care occupation.
08.05 Discuss the importance of maintaining confidentiality of information, including computer information.
08.06 Recognize the limits of authority and responsibility of health care workers.
08.07 Recognize and report illegal and unethical practices of health care workers.
08.08 Recognize and report abuse and neglect.

09.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

09.01 Develop a basic understanding of the structure and function of the body systems.
09.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
09.03 Identify psychological reactions to illness including defense mechanisms.
09.04 Recognize the steps in the grief process.
09.05 Explain basic concepts of positive self image, wellness and stress.
09.06 Develop a wellness and stress control plan that can be used in personal and professional life.
09.07 Explain the nutrition pyramid.

10.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

10.01 Demonstrate the safe use of medical equipment.
10.02 Recognize and report safety hazards.
10.03 Identify and practice security procedures for medical supplies and equipment.
10.04 Demonstrate proper body mechanics.
10.05 Demonstrate the procedure for properly identifying patients.
10.06 Demonstrate procedures for the safe transport and transfer of patients.
10.07 Describe fire, safety, disaster and evacuation procedures.

11.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

11.01 Monitor and record vital signs.
11.02 Describe legal parameters relating to the administration of emergency care.
11.03 Obtain and maintain BLS for Healthcare Providers or higher.

11.04 Demonstrate basic understanding of first aid and emergency care.
11.05 Recognize adverse drug related emergencies and take appropriate first aid action.

12.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

12.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
12.02 Demonstrate knowledge of surgical asepsis.
12.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

13.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

13.01 Define terms and demonstrate basic computer skills.
13.02 Describe the uses of computers in health care.

14.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

14.01 Conduct a job search.
14.02 Secure information about a job.
14.03 Identify documents that may be required when applying for a job.
14.04 Complete a job application form correctly.
14.05 Demonstrate competence in job interview techniques.
14.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
14.07 Identify acceptable work habits.
14.08 Demonstrate knowledge of how to make job changes appropriately.
14.09 Demonstrate desirable health habits.
14.10 Recognize appropriate affective/professional behavior.
14.11 Write an appropriate resume.

15.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

15.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
15.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
15.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
15.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
15.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

16.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

16.01 Draw, read, and report on graphs, charts and tables.
16.02 Measure time, temperature, distance, capacity, and mass/weight.
16.03 Make and use measurements in both traditional and metric units.
16.04 Make estimates and approximations and judge the reasonableness of the result.
16.05 Convert from regular to 24 hour time.
16.06 Demonstrate ability to evaluate and draw conclusions.
16.07 Organize and communicate the results obtained by observation and experimentation.
16.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
16.09 Calculate ratios.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417231
Course Title: Vision Care Assisting 3 95-96
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

17.0 COMPLETE FRAME AND PATIENT MEASUREMENTS--The student will be able to:

17.01 Identify different frame and temple types.
17.02 Complete patient prescription calculations.
17.03 Measure the frame PD and the eye Pupillary Distance.
17.04 Make estimates and approximations and judge the reasonableness of the result in making stock selections.

18.0 DEMONSTRATE KNOWLEDGE OF LENS THEORY--The student will be able to:

18.01 Demonstrate knowledge of optical measurement.
18.02 Demonstrate knowledge of light refraction and the physics of glass.
18.03 Use appropriate optical terminology and abbreviations.
18.04 Demonstrate knowledge of the anatomy and physiology of the eye and the disorders effecting vision.
18.05 Give and receive patient orders over the phone.

19.0 GRIND AND POLISH A GLASS LENS TO GIVEN SPECIFICATIONS--The student will be able to:

19.01 Layout and block a cylindrical and spherical lens.
19.02 Remove required amount of glass as specified from cylindrical and spherical lens.
19.03 Cut concave and convex cylinder to given specification.
19.04 Finish and polish a glass lens to given specifications.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8417232
Course Title: Vision Care Assisting 4 95-96
Course Credit: 1

The student completing this course will be able to perform the following intended outcomes and student performance standards:

20.0 EDGE, TINT AND INSPECT A PAIR OF GLASS OR PLASTIC LENSES AND INSERT INTO A FRAME--The student will be able to:

20.01 Edge and bevel a lens.
20.02 Heat treat a lens.
20.03 Check a lens for safety.
20.04 Insert lens into a frame.
20.05 Demonstrate knowledge of frame repair.
20.06 Demonstrate knowledge of lens tinting.
20.07 Inspect completed spectacles.

21.0 DEMONSTRATE KNOWLEDGE OF FRAME SELECTION TECHNIQUES USED IN A DISPENSING OFFICE SETTING--The student will be able to:

21.01 Identify frame parts and materials.
21.02 Demonstrate knowledge of frame measurement.
21.03 Demonstrate pupillary distance measurement.
21.04 Demonstrate frame selection considering customer and frame characteristics.

22.0 DEMONSTRATE KNOWLEDGE OF FRAME ADJUSTMENT AND ALIGNMENT--The student will be able to:

22.01 Select correct frame and bridge size.
22.02 Verify prescription information.
22.03 Insert lenses in zyl, optyl, and nylon frames.
22.04 Perform frame adjustment and alignment.
22.05 Perform frame repairs.

23.0 RECOGNIZE PATIENT NEEDS IN RELATION TO LENS CHARACTERISTICS--The student will be able to:

23.01 Identify the effects of types of lights on glass lenses.
23.02 Describe the effects of types of tint on the eye.
23.03 Identify types of glass coatings.
23.23 Identify the effects of the optical prism on lenses.
23.05 Define prism imbalance, vertical imbalance and full imbalance.
23.06 Identify occupational eyewear and special purpose frames.

24.0 COMPLETE A CASE HISTORY--The student will be able to:

24.01 Record the patient's chief complaints.
24.02 Record the patient's medical and ocular history.
24.03 Record the family's medical and ocular history.
24.23. Record the social history.

25.0 PREPARE PATIENTS FOR AND ASSIST IN TESTING FOR EYE DISORDERS--The student will be able to:

25.01 Define myopia, hyperopia, astigmatism, and ametropia.
25.02 Perform visual acuity screening and record results.
25.03 Demonstrate knowledge of selected instruments used in determining specific eye disorders.

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Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Health Care Services
Occupational Area:	Health Science Education
	PSVC
CIP Number	0318.070101
Grade Level	College Credits
Length	Certificate/ 360 clock hours

I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as Health Services supervisors or medicine and health service management (INDUSTRY TITLE). This program is for individuals who are currently employed in the health field or seeking employment in mid-management positions in the health field. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

The content includes, but is not limited to, leadership and supervisory skills, laws and regulations pertaining to health care facilities and agencies, organizational structure of health care facilities, budgeting and fiscal management, making employee assignments and scheduling, legal aspects of health care, health and safety including CPR and employability skills.

The program is designed for those individuals who already have credentialing in a health profession, i.e. appropriate licensure, certification or registration in their health care field.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES:** Clinical learning shall be provided in a health care facility that will meet the learning objectives and will be most comparable to the student's present or future area of employment.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

The Health Care Services Program, with emphasis on middle management skills, is a complex program requiring current knowledge in both health care and legislation affecting the health care delivery system. Because of its ever growing complexity, it requires instructors who have a Master's Degree or higher. Their disciplines can come from a variety of fields, ie: social sciences, nursing, business administration or education.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

To augment the program areas, community leaders possessing expertise in specific health care areas may be utilized.

The typical length of this program for the average achieving student is 360 hours with a community college certificate.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health occupations program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.

05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

HEALTH CARE SERVICES (12-20)

12.0 Demonstrate leadership and administrative skills basic to management in any health care facility.
13.0 Interpret federal, state and local laws as they apply to health care acilities and agencies.
14.0 Demonstrate knowledge of operational and organizational structures of health care facilities and agencies.
15.0 Demonstrate knowledge of psychological problems among those who need health care and find acceptable solutions.
16.0 Demonstrate knowledge of materials and supplies needed to care for clients and how to obtain them for staff.
17.0 Demonstrate knowledge of occupational safety and health for clients and employees.
18.0 Demonstrate knowledge of appropriate work-loads for each employee and knowledge of the amount of care each client requires.
19.0 Review, approve and monitor departmental capital and operational budgets.
20.0 Comply with accreditation standards.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Health Care Services
Secondary Number:
Postsecondary Number: 0318.070101

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.

06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

HEALTH CARE SERVICES The following intended outcomes lead to the occupational completion point of Health Care Supervisor.

12.0 DEMONSTRATE LEADERSHIP AND ADMINISTRATIVE SKILLS BASIC TO MANAGEMENT IN ANY HEALTH CARE FACILITY--The student will be able to:

12.01 Describe the American Health Care Delivery System, its scope and the organizational climate that serves as the setting and framework for managing health care organizations.
12.02 Identify current trends and perspectives related to the management of health care organizations and the means by which the application of sound management principles and behavior can facilitate change.
12.03 Interpret managerial principles, practices and processes to the delivery of health care.
12.04 Identify the role, responsibilities and parameters for the various levels of management within the health care organizations.
12.05 State the control processes and techniques used to ensure that the objectives, strategies and policies of health care delivery are achieved effectively and efficiently.
12.06 Relate the various aspects of organizational dynamics (decision making, motivations, leadership, and communication) to the needs and problems of health care organizations.
12.07 Relate personnel administration practices to the total scope of labor relations, including workforce acquisition, maintenance, and utilization.

13.0 INTERPRET FEDERAL, STATE AND LOCAL LAWS AS THEY APPLY TO HEALTH CARE FACILITIES AND AGENCIES--The student will be able to:

13.01 Cite federal, state and local institutional requirements governing the health care facility.
13.02 List required standards and procedures for facility and staff.
13.03 Identify mandatory requirements regarding environmental health and safety standards.
13.04 Discuss the impact of legislative changes on health care facilities and staff.
13.05 Identify the Florida Statutes as applied to health care facilities and health care workers.

14.0 DEMONSTRATE KNOWLEDGE OF OPERATIONAL AND ORGANIZATIONAL STRUCTURES OF HEALTH CARE FACILITIES AND AGENCIES--The student will be able to:

14.01 Describe the functions and standards of departments in health care facilities.
14.02 Contrast administrative roles and responsibilities in different types of health care agencies.
14.03 Describe principles and philosophies of health care agencies that deliver health care services.
14.04 Identify several basic principles of medical care.
14.05 State communication techniques within the health care system.

15.0 DEMONSTRATE KNOWLEDGE OF PSYCHOLOGICAL PROBLEMS AMONG THOSE WHO NEED HEALTH CARE AND FIND ACCEPTABLE SOLUTIONS--The student will be able to:

15.01 Recognize the worth and dignity of each client.
15.02 Accommodate individual differences, characteristics, and behaviors.
15.03 Adjust room assignments, personnel assignments, etc., to satisfy clients needs.

16.0 DEMONSTRATE KNOWLEDGE OF MATERIALS AND SUPPLIES NEEDED TO CARE FOR CLIENTS AND HOW TO OBTAIN THEM FOR STAFF--The student will be able to:

16.01 Evaluate current inventory.
16.02 Prepare purchase order, being mindful of current financial status of institution.
16.03 Shop for quality, price, and quantity.

17.0 DEMONSTRATE KNOWLEDGE OF OCCUPATIONAL SAFETY AND HEALTH FOR CLIENTS AND EMPLOYEES--The student will be able to:

17.01 Prepare an evacuation plan.
17.02 Plan and conduct fire drills making sure that every person on duty is aware of their individual responsibility.

17.03 Inspect labels on hazardous substances including poison labels.
17.04 Make certain that all substances have appropriate storage areas.
17.05 Conduct inservice for employees.
17.06 Respond to workers inquiries and post notices.

18.0 DEMONSTRATE KNOWLEDGE OF APPROPRIATE WORK-LOADS FOR EACH EMPLOYEE AND KNOWLEDGE OF THE AMOUNT OF CARE EACH CLIENT REQUIRES--The student will be able to:

18.01 Prepare job descriptions.
18.02 Prepare care plans for each client.
18.03 Figure staff hours required for total care on one unit using available statistics.
18.04 Identify factors which alter the amount of care needed and the number of staff hours required for different diagnoses.

19.0 REVIEW, APPROVE AND MONITOR DEPARTMENTAL CAPITAL AND OPERATIONAL BUDGETS--The student will be able to:

19.01 Develop a capital budget justification format.
19.02 Delegate capital budget preparation to key managers.
19.03 Analyze and approve appropriate capital budget items.
19.04 Develop an operational budget format.
19.05 Analyze and approve appropriate financial levels in each operational budget.

20.0 COMPLY WITH ACCREDITATION STANDARDS--The student will be able to:

20.01 List and implement procedures to meet required standards for health care facilities.
20.02 Identify the required standards for health care personnel.
20.03 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
20.04 Develop policies and operational procedures to meet required standards.
20.05 Establish liaison mechanisms with appropriate accrediting organizations.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Health Information Management
Occupational Area:	Health Science Education
	PSV
CIP Number	0317.050600
Grade Level	College Credits
Length	AS Degree/67 credit hours

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as Health Information Technicians (079.367-014), Medical Record Technicians (32911218), or to provide supplemental training for persons previously or currently employed in these occupations. It prepares a person to take the national accreditation examination for Accredited Record Technician (ART). The program should meet the program requirements of the American Medical Association Committee of Allied Health Education and Accreditation in collaboration with the American Health Information Management Association (AHIMA).

The content includes, but is not limited to, health information management, ethical and medico-legal aspects, basic computer usage for medical records, medical terminology, anatomy and physiology, pathophysiology, medical record science, word processing, statistics, coding, indexing, hospital procedures, directed clinical practice, and employability skills. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory facilities and equipment should be provided. Laboratory activities should be correlated with classroom activities and reinforced in the clinical area. Supervised clinical practice is an integral part of the program.

III. **SPECIAL NOTE**: This program must be taught in accordance with the accrediting standards of: American Health Information Management

Association, 919 North Michigan Avenue, Suite 1400, Chicago, Illinois 60611 (312/787-2672).

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C. Students should be encouraged to join the American Medical Record Association and participate in the state/local association.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program and is printed in a supplement to this document.

The standard credit hour length for this program is 67 credit hours according to Rule 6A-14.030.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.

06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

HEALTH INFORMATION MANAGEMENT (12-20)

12.0 Describe management functions of health information services.
13.0 Identify the legal aspects for the control and use of health information.
14.0 Describe various aspects of personnel supervision.
15.0 Participate in the development and implementation of health information systems.
16.0 Follow procedures to assure adequate documentation of health care.
17.0 File, maintain and retrieve health information.
18.0 Collect, compute, analyze and present health care statistics.
19.0 Participate in the review of health care services.
20.0 Use classification systems for health care information.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Health Information Management
Secondary Number:
Postsecondary Number: 0317.050600

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis..
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

HEALTH INFORMATION MANAGEMENT - This module leads to the occupational completion point of Health Information Technician.

12.0 DESCRIBE MANAGEMENT FUNCTIONS OF HEALTH INFORMATION SERVICES--The student will be able to:

12.01 Assist in preparing reports which reflect the status of a health information service.
12.02 Apply policies and procedures of a health information service.
12.03 Maintain quality and quantity of work performed in a health information service using established standards.
12.04 Maintain a systematic work flow for a health information service.
12.05 Retrieve information and prepare reports for the administrative and professional staff.
12.06 Define the role of the health information technician as a manager.

13.0 IDENTIFY THE LEGAL ASPECTS FOR THE CONTROL AND USE OF HEALTH INFORMATION--The student will be able to:

13.01 Identify information in a health record that is confidential and non-confidential.
13.02 Determine what information may be released without an authorization.
13.03 Use legal terminology encountered in health information services.
13.04 Interpret and respond to various legal documents.
13.05 Assist in designing proper consent forms for release of information.
13.06 Identify local, state and federal laws and regulations pertinent to the health information field.
13.07 Discuss the Code of Ethics of the American Health Information Mamagement Association (AHIMA).

14.0 DESCRIBE VARIOUS ASPECTS OF PERSONNEL SUPERVISION--The student will be able to:

14.01 Describe the leadership, direction and documentation necessary for supervision of personnel.
14.02 Write a job description.
14.03 Apply personnel policies within a health information service.

15.0 PARTICIPATE IN THE DEVELOPMENT AND IMPLEMENTATION OF HEALTH INFORMATION SYSTEMS--The student will be able to:

15.01 Apply policies and procedures for collecting data, computing statistics and retaining information by manual or automated systems.
15.02 Interpret and utilize the language of medicine.
15.03 Spell, define and pronounce medical words and their components.
15.04 Explain basic principles of disease, its etiology, pathophysiology, diagnostic techniques and treatment.
15.05 Input data into computerized health information systems.

16.0 FOLLOW PROCEDURES TO ASSURE ADEQUATE DOCUMENTATION OF HEALTH CARE--The student will be able to:

16.01 Follow procedures for quantitative and qualitative analysis of health records.
16.02 Identify purposes and uses of health records.
16.03 Identify basic health record forms and required content.
16.04 Assemble and analyze a health record.
16.05 Follow procedures for the retention of health information.
16.06 Follow procedures designed to control the flow of health care data.
16.07 Follow procedures for the destruction of health records.
16.08 Identify health information imaging techniques and equipment.

17.0 FILE, MAINTAIN AND RETRIEVE HEALTH INFORMATION--The student will be able to:

17.01 Identify and describe admission numbering systems and their advantages and disadvantages.
17.02 Identify and describe filing systems and their advantages and disadvantages.
17.03 File and retrieve health information.
17.04 Retrieve health information from manual or automated systems.

18.0 COLLECT, COMPUTE, ANALYZE AND PRESENT HEALTH CARE STATISTICS--The student will be able to:

18.01 Abstract data from health records.
18.02 Identify trends in data processing of health information.
18.03 Calculate and present health care statistical information.

19.0 PARTICIPATE IN THE REVIEW OF HEALTH CARE SERVICES--The student will be able to:

19.01 Describe health care organizational and management structure.
19.02 List the functions of medical staff committees.
19.03 Describe quality assurance, risk management and utilization review systems.
19.04 Assist in the development and analysis of peer review tools.
19.05 Define the role and functions of the professional review organization (PRO).

20.0 USE CLASSIFICATION SYSTEMS FOR HEALTH CARE INFORMATION--The student will be able to:

20.01 Trace the development of nomenclatures and classification systems.
20.02 Identify conventions and characters used in classification systems.
20.03 Follow existing procedures to code diagnoses and procedures (CPT and ICD-9-CM).
20.04 Perform DRG assignment.

July 1996

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Health Occupations Cooperative Education-OJT
Occupational Area: Health Science Education

	Secondary	PSAV
Program Numbers	**8400410**	**H179999**
CIP Number	0317.9999CP	0317.9999CP
Grade Level	10-12, 30, 31	30, 31
Length	Multiple credits	Multiple hours
Certification	ANY HEALTH OCCUP ED G	ANY HEALTH OCCUP ED G

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this course is to enhance or further develop competency through the on-the-job training experience. The on-the-job experiences provided must be related to the job preparatory program.

This method of delivery is not intended for supplemental vocational course instruction and shall not be claimed for supplemental FTE purposes.

Basic skills in English, mathematics, and science acquired through the job preparatory program should be reinforced through on-the-job training.

II. **LABORATORY ACTIVITIES**: A work station is provided as required to support the on-the-job training activities of the student.

III. **SPECIAL NOTE**: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

For on-the-job training, the following is required for each student: a training agreement; a training plan with selected student performance standards identified and signed by the student, teacher and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects appropriate equipment for the training; and skills and tasks which are relevant to the occupation which the student has chosen as a career goal. The student must receive compensation for work performed.

The teacher/coordinator must visit each job site a minimum of once during each grading period for the purpose of evaluating the student's progress in attaining the competencies listed in the training plan. It is recommended that for every twenty students (or portion thereof) enrolled in this course, the teacher/coordinator be given a minimum of one hour of OJT-coordination release time per day so they may visit one hour of OJT-coordination release time per day so they may visit students on the job and to manage the cooperative method of instruction effectively. The supervised on-the-job activities may be continued as a summer learning experience without classroom instruction for students who participated in the program during the school year immediately preceding the summer assignment for students.

This course may be taken by a student for one or more semester(s) at the secondary level. A student may earn multiple credits in this course. The specific student performance standards which the student must achieve to earn credit must be specified in the OJT training plan.

IV. **INTENDED OUTCOMES**: After successfully completing this course, the student will be able to:

01.0 Perform designated job skills.
02.0 Demonstrate work ethics.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Health Occupations Cooperative Education-OJT
Secondary Number:	8400410
Postsecondary Number:	H179999

01.0 PERFORM DESIGNATED JOB SKILLS--The student will be able to:

01.01 Perform tasks as outlined in the training plan.
01.02 Demonstrate job performance skills.
01.03 Demonstrate safety procedures on the job.
01.04 Maintain appropriate records.
01.05 Attain an acceptable level of productivity.
01.06 Demonstrate appropriate dress and grooming habits.
01.07 Recognize limits of authority and responsibility.
01.08 Identify rights and responsibilities of employers and employees.
01.09 Identify legal ramifications of actions/inactions in the job area.
01.10 Recognize and value time.
01.11 Recognize and value accuracy.

02.0 DEMONSTRATE WORK ETHICS--The student will be able to:

02.01 Follow directions.
02.02 Demonstrate good human relations skills on the job.
02.03 Demonstrate good work habits.
02.04 Demonstrate acceptable business ethics.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Health Occuptions Education Directed Study
Occupational Area:	Health Science Education
	Secondary
Program Numbers	**8400100**
CIP Number	0317.999910
Grade Level	10-12, 30, 31
Length	Multiple credits
Certification	ANY HEALTH OCCUP ED G

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this course is to provide students with additional competencies or more extensive occupational experiences related to competencies in a job preparatory program that will enhance their opportunities for employment in the occupation chosen by the student. The content is prescribed by the instructor based upon the individual student's need for directed study. Research, portfolio development, and field experiences may be considered appropriate activities if related to framework outcomes in the job preparatory program.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES**: A work station is provided as appropriate to support the training activities of the student.

III. **SPECIAL NOTE**: The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

This course may be taken only by a student who has completed or is currently completing a specific secondary job preparatory program or occupational exit for additional study in this program. A student may earn multiple credits in this course.

The selected intended outcomes and student performance standards which the student must master to earn credit must be outlined in an instructional plan developed by the instructor.

The student enrolled in this course must be reported using the Course Code Directory program number for the specific occupational exit.

IV. **INTENDED OUTCOMES**: After successfully completing this course, the student will be able to:

01.0 Perform the specific student performance standards identified through the instructor's assessment for determining individual student needs.

02.0 Demonstrate a knowledge of the academic skills appropriate for the selected occupational goal.

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Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Health Occupations Education Directed Study
Secondary Number:	8400100
Postsecondary Number:	

01.0 PERFORM THE SPECIFIC STUDENT PERFORMANCE STANDARDS IDENTIFIED THROUGH THE INSTRUCTOR'S ASSESSMENT FOR DETERMINING INDIVIDUAL STUDENT NEEDS--The student will be able to complete the individualized plan of study.

02.0 DEMONSTRATE A KNOWLEDGE OF THE ACADEMIC SKILLS APPROPRIATE FOR THE SELECTED OCCUPATIONAL GOAL--The student will be able to:

02.01 Use addition, subtraction, multiplication, and division to solve problems.
02.02 Research, read, understand, and find information.
02.03 Write logical statements and reports using the standard rules of English.
02.04 Apply scientific method.
02.05 Use and relate academic knowledge.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Health Services Management
Occupational Area:	Health Science Education
	PSV
CIP Number	0318.070100
Grade Level	College Credits
Length	AS Degree/62 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as medicine and health services managers, medicine and health service management (15008019), or health service administrators or to provide supplemental training for persons previously or currently employed in these occupations. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Two options are offered:

OPTION I is a generic program to prepare health service managers.

OPTION II is a program designed for students who already have occupational background and/or credentials in the health field to become managers within their specified discipline.

The content includes, but is not limited to, communication skills, leadership skills, human relations and employability skills, principles of management, introduction to computer literacy, health care organization, medical ethics, legal aspects, and advanced technical skills in a chosen health-related profession, health and safety, and CPR.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The curriculum content must include, courses in management, accounting and bookkeeping, personnel relations and management, governmental standards and regulation of health care administration in diverse health care settings (including nursing administration and patient care).

The theory base is built upon supportive courses available to students in the community college setting. Such courses shall include, but not be limited to, communication, social science, business mathematics and computer application.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Clinical learning, if required, shall be provided in the health care setting that will meet the learning objectives and will be most comparable to the students' future areas of employment. The Human Patient Simulatpr (HPS) may be used to fulfill or enhance some clinical hours.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

OPTION I: Programs must be approved by the Florida Board of Examiners of Nursing Home Administrators for graduates to be eligible to take the state licensure examination to become a nursing home administrator.

Graduates may be eligible to apply to take the National Administrators Board examination and the State Board licensing examination for licensure as a nursing home administrator in the State of Florida if they hold an advanced 4 year degree or meet the requirements of a Baccalaureate degree at an institution of higher learning.

OPTION II: The program parameters contain a minimum of 15 credit hours of general education, a minimum of 15 credit hours of management or health-related managerial courses, and courses in health related areas.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 62 credit hours according to Rule 6A-14.030.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OPTION I - NURSING HOME ADMINISTRATION (12-21)

12.0 Demonstrate leadership and administrative skills basic to management in any health care facility.
13.0 Interpret federal, state and local laws as they apply to health care facilities.
14.0 Demonstrate knowledge of operational and organizational structures of health care facilities.
15.0 Demonstrate knowledge of psychological problems among residents and find acceptable solution.
16.0 Demonstrate knowledge of materials and supplies needed to care for residents and how to obtain them for staff.
17.0 Demonstrate knowledge of occupational safety and health for residents/patients and employees.
18.0 Demonstrate knowledge of appropriate work-loads for each employee and knowledge of the amount of care each resident requires.
19.0 Review, approve and monitor departmental capital and operational budgets.
20.0 Identify and apply legal reimbursement systems.

21.0 Comply with accreditation standards of governmental or governmental appointed agencies/organization.

OPTION II - OTHER HEALTH CARE MANAGERS (22)

22.0 Demonstrate an understanding of technical competencies from one or more specialized health care areas.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Health Services Management
Secondary Number:	
Postsecondary Number:	0318.070100

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.

02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.

06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

OPTION I (12.0 - 21.0)- NURSING HOME ADMINISTRATION: Students completing this module have achieved the occupational completion point of Nursing Home Administrator and may be elgible to take the Florida examination for Nursing Home Administrator.

12.0 DEMONSTRATE LEADERSHIP AND ADMINISTRATIVE SKILLS BASIC TO MANAGEMENT IN ANY HEALTH CARE FACILITY--The student will be able to:

12.01 Identify current trends and perspectives related to the management of health care organizations and the means by which the application of sound management principles and behavior can facilitate change.
12.02 Interpret managerial principles, practices and processes to the delivery of health care.
12.03 Identify the role, responsibilities and parameters for the various levels of management within the health care organizations.
12.04 State the control processes and techniques used to ensure that the objectives, strategies and policies of health care delivery are achieved effectively and efficiently.
12.05 Relate the various aspects of organizational dynamics (decision making, motivation, leadership, and communication) to the needs and problems of health care organizations.
12.06 Relate personnel administration practices to the total scope of labor relations, including manpower acquisition, maintenance, and utilization.

13.0 INTERPRET FEDERAL, STATE AND LOCAL LAWS AS THEY APPLY TO HEALTH CARE FACILITIES--The student will be able to:

13.01 Cite federal, state and local institutional requirements.
13.02 List required standards and procedures for facility and staff.
13.03 Identify mandatory requirements regarding environmental health and safety standards.
13.04 Discuss the impact of legislative changes on health care facilities.
13.05 Identify the Florida Statutes as applied to health care facilities.

14.0 DEMONSTRATE KNOWLEDGE OF OPERATIONAL AND ORGANIZATIONAL STRUCTURES OF HEALTH CARE FACILITIES--The student will be able to:

14.01 Describe the functions and standards of departments in health care facilities.
14.02 Contrast administrative roles and responsibilities in different types of health care agencies.
14.03 Describe principles and philosophies of health care agencies delivering long-term, acute and other types of health care services.
14.04 Identify several basic principles of medical care.

15.0 DEMONSTRATE KNOWLEDGE OF PSYCHOLOGICAL PROBLEMS AMONG RESIDENTS AND FIND ACCEPTABLE SOLUTION--The student will be able to:

15.01 Accomodate individual differences, characteristics, and behaviors.
15.02 Adjust room assignments, personnel assignments, etc., to satisfy residents.

16.0 DEMONSTRATE KNOWLEDGE OF MATERIALS AND SUPPLIES NEEDED TO CARE FOR RESIDENTS AND HOW TO OBTAIN THEM FOR STAFF--The student will be able to:

16.01 Evaluate current inventory.
16.02 Prepare purchase order, being mindful of current financial status of institution.
16.03 Shop for quality, price, and quantity.

17.0 DEMONSTRATE KNOWLEDGE OF OCCUPATIONAL SAFETY AND HEALTH FOR RESIDENTS/PATIENTS AND EMPLOYEES--The student will be able to:

17.01 Prepare an evacuation plan.
17.02 Plan and conduct fire drills making sure that every person on duty is aware of their individual responsibility.
17.03 Inspect labels on hazardous substances including poison labels.
17.04 Make certain that all substances have appropriate storage areas.
17.05 Conduct inservice for employees.
17.06 Respond to workers inquiries and post notices.

18.0 DEMONSTRATE KNOWLEDGE OF APPROPRIATE WORK-LOADS FOR EACH EMPLOYEE AND KNOWLEDGE OF THE AMOUNT OF CARE EACH RESIDENT REQUIRES--The student will be able to:

18.01 Prepare job descriptions.
18.02 Prepare care plans for each resident.
18.03 Figure man-hours required for total care on one unit using available statistics.
18.04 Identify factors which alter the amount of care needed and the number of man-hours required for different diagnoses.

19.0 REVIEW, APPROVE AND MONITOR DEPARTMENTAL CAPITAL AND OPERATIONAL BUDGETS--The student will be able to:

19.01 Develop a capital budget justification format.
19.02 Delegate capital budget preparation to key managers.
19.03 Analyze and approve appropriate capital budget items.
19.04 Develop an operational budget format.
19.05 Analyze and approve appropriate financial levels in each operational budget.

20.0 IDENTIFY AND APPLY LEGAL REIMBURSEMENT SYSTEMS--The student will be able to:

20.01 Establish a patient classification system within a health care facility.
20.02 Establish a mechanism for utilization review.
20.03 Develop an accounts receivable system which monitors and optimizes reimbursement.

21.0 COMPLY WITH ACCREDITATION STANDARDS OF GOVERNMENTAL OR GOVERNMENTAL APPOINTED AGENCIES/ORGANIZATION--The student will be able to:

21.01 List and implement procedures to meet required standards for health care facilities.
21.02 Identify the required standards for health care personnel.
21.03 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
21.04 Develop policies and operational procedures to meet required standards.
21.05 Establish liason mechanisms with appropriate accreditating organizations.

OPTION II (22.0) - OTHER HEALTH CARE MANAGERS: Students enrolled in this minimum 15 credit module in health related managerial courses have a background and/or credentials in the health field and train to become managers within their specific discipline. The occupational completion point for this module is Health Services Managers.

22.0 DEMONSTRATE AN UNDERSTANDING OF TECHNICAL COMPENTENCIES FROM ONE OR MORE SPECIALIZED HEALTH CARE AREAS--The student will be able to demonstrate an understanding of technical competencies as specified in the curriculum frameworks of any health occupations postsecondary adult or postsecondary vocational program.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Health Unit Coordinator
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170513**
CIP Number	0317.051300
Grade Level	30, 31
Length	450 hours
Certification	NURSING ED @5 PRAC NURSE @7 @G TEC MED !7 !G REG NURSE G

I. **MAJOR CONCEPTS/CONTENT:** The program is designed to prepare students for employment as ward clerks (245.362-014) or health unit coordinators or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work practices, clerical skills, safety and security use of computers, interpretation and transcription of doctors' orders, and employability skills. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES:** Transcription of physicians' orders is an integral part of this course. This competency is achieved through simulated practice with standard equipment and supplies used in a health care facility by the health unit coordinator. An overview of anatomy and physiology serves as a foundation for medical terminology and CPR/Heartsaver/first aid. A working knowledge of the computer is a competency achieved through actual practice. Role playing is one of the methods which can be used for developing interpersonal skills.

Clinical learning experiences are an integral part of this program.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

It is recommended that completers of this program take the National Association of Health Unit Coordinators Certification examination which is offered annually.

The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

When a student with a disability is enrolled in a vocational class with modifications to the curriculum framework, the particular outcomes and student performance standards which the student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

In accordance with rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 10.0, and Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The typical length of this program for the average achieving student is three credits (450 clock hours).

IV. **INTENDED OUTCOMES:** After successfully completing this program, the student will be able to:

01.0 Apply basic math skills.
02.0 Apply basic scientific competencies.
03.0 Demonstrate Communication skills.
04.0 Demonstrate employability skills.
05.0 Interpret and apply medical terminology.
06.0 Demonstrate legal and ethical behaviors.
07.0 Organize and maintain efficient work practices.
08.0 Perform clerical duties.
09.0 Practice safety/security.
10.0 Operate computers.
11.0 Read, interpret and transcribe physicians' orders.
12.0 Use interpersonal skills effectively.
13.0 Demonstrate knowledge of blood borne diseases, including AIDS.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title:	Health Unit Coordinator
Secondary Number:	8415200
Postsecondary Number:	H170513

01.0 APPLY BASIC MATH SKILLS--The student will be able to:

01.01 Record graphs, charts and tables.
01.02 Make and use measurements in both traditional and metric units.
01.03 Convert from regular to 24 hour time.

02.0 APPLY BASIC SCIENTIFIC COMPETENCIES--The student will be able to:

02.01 Demonstrate ability to evaluate and draw conclusions.
02.02 Demonstrate knowledge of anatomy and physiology of body systems.

03.0 DEMONSTRATE COMMUNICATION SKILLS--The student will be able to:

03.01 Distinguish between personal opinion and factual reports on patient charts.
03.02 Transmit information in oral and written form.
03.03 Translate signs, symbols, and abbreviations commonly used in health care facilities.

04.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

04.01 Conduct a job search.
04.02 Secure information about a job.
04.03 Identify documents that may be required when applying for a job.
04.04 Complete a job application correctly.
04.05 Demonstrate competence in job interview techniques.
04.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
04.07 Identify acceptable work habits.
04.08 Demonstrate knowledge of how to make job changes appropriately.
04.09 Demonstrate acceptable employee health habits.

05.0 INTERPRET AND APPLY MEDICAL TERMINOLOGY--The student will be able to:

05.01 Identify components of medical terms.
05.02 Spell, pronounce and define medical terms.
05.03 Relate medical terminology to the body systems.
05.04 Identify and define standard abbreviations and medical symbols.
05.05 Identify apothecary and metric systems.

06.0 DEMONSTRATE LEGAL AND ETHICAL BEHAVIORS--The student will be able to:

06.01 Explain the patients' "Bill of Rights".

06.02 Identify legal and ethical principles regarding the patients' charts, correcting errors, confidentiality, transcribing, patient contact and job description.
06.03 Identify and follow hospital policies.
06.04 Demonstrate knowledge of Center for Disease Control (CDC) guidelines as it applies to blood borne pathogens.
06.05 Identify the components of the National Association of Health Unit Coordinator's "Code of Ethics."
06.06 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.

07.0 ORGANIZE AND MAINTAIN EFFICIENT WORK PRACTICES--The student will be able to:

07.01 Arrange daily activities by priority.
07.02 Prepare and post unit information lists.
07.03 Maintain a supply of assembled medical/surgical admission packets.
07.04 Assemble/disassemble addressograph plate.
07.05 Distribute forms and articles from in-basket.
07.06 Identify, store and maintain unit equipment/supplies in a neat and orderly manner.
07.07 Sanitize nursing station equipment.

08.0 PERFORM CLERICAL DUTIES--The student will be able to:

08.01 Record patients' allergies.
08.02 Prepare and add forms to chart.
08.03 Record vital signs and patient information.
08.04 Prepare patients' admission chart.
08.05 Record admission data on unit records.
08.06 Prepare discharge chart for medical records.
08.07 Obtain previous admission records/X-rays.
08.08 Post all reports on charts.
08.09 File and retrieve assorted forms.
08.10 Perform patient admission, transfer and discharge procedures.

09.0 PRACTICE SAFETY/SECURITY--The student will be able to:

09.01 Participate in emergency or disaster plan, CPR and first aid.
09.02 Initiate codes upon nurse's directions.
09.03 Report safety hazards.
09.04 Identify institution's security policies/procedures.
09.05 Practice good body mechanics as they apply to job duties.

10.0 OPERATE COMPUTERS--The student will be able to:

10.01 Sign on to computers.
10.02 Enter data/computer code.
10.03 Correct mistakes.
10.04 Use back-up system.
10.05 Call up information stored in computer.

11.0 READ, INTERPRET AND TRANSCRIBE PHYSICIANS' ORDERS--The student will be able to:

11.01 Identify all types of physician's orders.
11.02 Prioritize orders for transcription.
11.03 Prepare and route requisitions manually or via computer.
11.04 Arrange for ordered consultations.
11.05 Schedule patients' treatments or therapy with other hospital departments.

12.0 USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

12.01 Accept and place telephone calls and relay messages.
12.02 Greet and direct professionals and visitors.
12.03 Operate communication systems.
12.04 Maintain a professional appearance by practicing good hygiene and adhering to dress code.
12.05 Adapt to changing conditions.
12.06 Use courtesy, tact, patience and assertiveness techniques in role playing situations.
12.07 Explain unit activities to on-coming staff.
12.08 Identify and use different methods of communication.
12.09 Identify and use "chain of command" in an institution/agency.

13.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

13.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
13.02 Identify community resources and services available to individual with diseases caused by blood borne pathogens.
13.03 Identify "at risk" behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
13.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
13.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Hospital Housekeeping Supervision
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170599**
CIP Number	0317.059901
Grade Level	30, 31
Length	360 hours
Certification	NURSING ED @5 PRAC NURSE @7 @G TEC MED !7 !G REG NURSE G

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as hospital housekeeping supervisor, housekeeping: institutional (61008409), (187.167-046), hospital housekeepers or hospital environmental services managers or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, maintenance of housekeeping supplies and equipment, housekeeping techniques, personnel management, purchasing and budgeting, interior design, landscaping, computer science, safety and security, occupational safety and health act, theories of supervision, theories of learning, nutrition, microbiology, economics, technical writing, english, foreign language, mathematics, sociology, psychology, speech, legal requirement skills, health and safety including CPR, Heartsaver and employability skills. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

II. **LABORATORY ACTIVITIES**: Classroom laboratory experiences are an integral part of this program. Clinical practicums/ internships should be utilized.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

This program should be approved by the National Executive Housekeepers Association, Inc. This association maintains an affiliate professional organization for teachers and students and a patron club for vendors. Vendors often supply valuable new instructional materials and audio visuals for loan. The Florida Association of Hospital Housekeepers is sponsored by the Florida Hospital Association.

The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction (OJT) is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

If this program is offered for 450 hours or more, in accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 9.0, and Reading 9.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The typical length of this program for the average achieving student is 360 clock hours which includes 90 clock hours for the Health Careers Core.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

HOSPITAL HOUSEKEEPTING SUPERVISION (12-24)

12.0 Organize and maintain supplies and equipment.
13.0 Manage housekeeping equipment.
14.0 Care for and distribute laundry.
15.0 Perform housekeeping activities.
16.0 Care for the cleaning and maintenance of horizontal and vertical surfaces within hospital.
17.0 Identify chemicals and their proper use.
18.0 Demonstrate safety, security and sanitation skills.
19.0 Describe joint commission accreditation of hospitals (JCAH) requirements, Florida's Right to Know Law, Hazardous Waste Disposal and local ordinances regarding the Environmental Services Department.
20.0 Delegate responsibilities, direct employees and follow-up on task completion.
21.0 Demonstrate techniques of scheduling from gathered data, design "day off" roster, and determine necessary FTE staff level for assigned responsibilities.
22.0 Design training programs for all levels of employees with scheduled retraining annually, using audio-visual instruction tools that are available.

23.0 Design, develop and install computer programs for operational activities, cost containment data, and project for future activities.

24.0 Demonstrate inter-departmental skills

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Hospital Housekeeping Supervision
Secondary Number:
Postsecondary Number: H170599

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

HOSPITAL HOUSEKEEPING SUPERVISION: A student completing the intended outcomes 12-24 will achieve the occupational completion point of Hospital Housekeeping Supervisor.

12.0 ORGANIZE AND MAINTAIN SUPPLIES AND EQUIPMENT--The student will be able to:

12.01 Organize storage area.
12.02 Stock "maintain" cart with supplies and equipment.
12.03 Maintain janitoral closet.
12.04 Check electrical equipment before using.
12.05 Perform preventative maintenance on heavy duty cleaning equipment.
12.06 Operate each piece of equipment.
12.07 Clean heavy duty equipment before returning to storage area.

13.0 MANAGE HOUSEKEEPING EQUIPMENT--The student will be able to:

13.01 Develop a training program and desired outcome on each piece of equipment within the hospital.
13.02 Develop retraining program, with proper recordkeeping of the employee's activities in this area.
13.03 Maintain a minimum inventory of recommended spare parts on all equipment for minor repair.
13.04 Develop and maintain schedule of renewals and repairs on all equipment.
13.05 Identify developments of new equipment.

14.0 CARE FOR AND DISTRIBUTE LAUNDRY--The student will be able to:

14.01 Demonstrate the most economical methods to prevent loss and waste.
14.02 Transport both clean and soiled laundry, utilizing distribution systems.
14.03 Check quality control.

15.0 PERFORM HOUSEKEEPING ACTIVITIES--The student will be able to:

15.01 Use all carpet shampoo methods.
15.02 Scrub, strip, finish and spray buff hard floor surfaces.

15.03 Mix chemicals as directed on the labels.
15.04 Perform all isolation techniques as instructed.
15.05 Perform daily sweeping, dust mopping, and wet mopping procedures.
15.06 Perform daily cleaning of patient and non-patient areas.
15.07 Perform bed making on check-outs.

16.0 CARE FOR THE CLEANING AND MAINTENANCE OF HORIZONTAL AND VERTICAL SURFACES WITHIN HOSPITAL--The student will be able to:

16.01 Prepare cleaning techniques for floors, walls, and ceilings, outlining chemicals to be used, tools, and equipment usage and the desired result.
16.02 Develop records as to job completion and necessary schedule to assure of proper cleaning and maintenance.

17.0 IDENTIFY CHEMICALS AND THEIR PROPER USE--The student will be able to:

17.01 Maintain par level inventory on all cleaning products to be used within the facility.
17.02 Identify each chemical as to its use, dilution level, storage area and replenishment.
17.03 Instruct each employee as to the use of each chemical, safety practices, and product limitations.
17.04 Ensure that each employee has complete knowledge of products as outlined by Florida Right to Know law. Record training activities regarding their statutory requirements.
17.05 Identify new products via information supplied by pertinent periodicals, technical bulletins, and chemical product supplies and manufacturers.
17.06 Work closely with infection control coordinator within the facility as to the use of sanitizing and disinfecting agents. Serve as an active member on the Hospital Infection Control Committee.

18.0 DEMONSTRATE SAFETY, SECURITY AND SANITATION SKILLS--The student will be able to:

18.01 Use OSHA principles concerning proper dress, usage of electrical equipment, and proper placement of warning signs.
18.02 Serve as an active member of the Hospital Safety OSHA Management Committee.
18.03 Develop a safety program within the department and appoint a safety monitor to assure proper procedures are adopted and followed.
18.04 Describe local, state, and federal requirements with regard to hazardous waste and their application to the hospital.
18.05 Work closely with the Hospital Control Coordinator regarding sanitation within the facility.
18.06 Ensure that all chemicals, supplies, and equipment are kept in lock and key storage at all times. (This is suggested to avoid improper use of chemicals and equipment and also to be an effective cost control tool.)

19.0 DESCRIBE JOINT COMMISSION ACCREDITATION OF HOSPITALS (JCAH) REQUIREMENTS, FLORIDA'S RIGHT TO KNOW LAW, HAZARDOUS WASTE DISPOSAL AND LOCAL ORDINANCES REGARDING THE ENVIRONMENTAL SERVICES DEPARTMENT--The student will be able to:

19.01 Obtain a copy of Joint Commission Accreditation of Hospitals (JCAH) requirements for the department and apply these requirements on day to day activities of all employees.
19.02 Describe the requirements of Florida's Right to Know Law and apply these requirements to the department.
19.03 Obtain information from state, local, and federal agencies regarding Hazardous Waste Disposal and apply these requirements to the department.
19.04 Obtain information from peer group in other hospitals for other local requests.

20.0 DELEGATE RESPONSIBILITIES, DIRECT EMPLOYEES AND FOLLOW-UP ON TASK COMPLETION--The student will be able to:

20.01 Accomplish mission of department by working through supervisors for expectations of the hospital.
20.02 Use the concept of "Tell them, show them, then tell them again."
20.03 Establish scheduled inspections of all areas within the facility.
20.04 Maintain current documentation as it relates to Hospital Housekeeping Supervision.

21.0 DEMONSTRATE TECHNIQUES OF SCHEDULING FROM GATHERED DATA, DESIGN "DAY OFF" ROSTER, AND DETERMINE NECESSARY FTE STAFF LEVEL FOR ASSIGNED RESPONSIBILITIES--The student will be able to:

21.01 Document physical inventory of hospital as to patient rooms, corridors, ancilliary areas, support areas, offices, lights, windows, vents and vertical surfaces.
21.02 Determine, by established ward units, what is necessary to complete department responsibilities.
21.03 Decide frequency of cleaning for inspection and write employee schedules from gathered information.
21.04 Determine number of staff necessary for desired levels.
21.05 Design "day off" roster for department.
21.06 Describe the administration responsibilities to perform with the results of 7.01 through 7.13.
21.07 Assign job titles to positions outlined in "day off" roster as to what is to be accomplished. (Example: Floor finishers, vacuum man, mop and buff, Housekeeper I, II or III.)

22.0 DESIGN TRAINING PROGRAM FOR ALL LEVELS OF EMPLOYEES WITH SCHEDULED RETRAINING ANNUALLY, USING AUDIOVISUAL INSTRUCTIONAL TOOLS THAT ARE AVAILABLE--The student will be able to:

22.01 Determine levels of skills necessary for job classification noted in 7.07 above.

22.02 Establish job descriptions for all positions outlined on "day off" roster.

22.03 Initiate training program for each job description and job title.

22.04 Maintain records of training and schedule retraining annually.

22.05 Gather training tools, audiovisual aids, question and answer exercises from sources available. (Suppliers of chemicals and equipment are an excellent source for these necessary tools.)

23.0 DESIGN, DEVELOP AND INSTALL COMPUTER PROGRAMS FOR OPERATIONAL ACTIVITIES, COST CONTAINMENT DATA, AND PROJECT FOR FUTURE ACTIVITIES--The student will be able to:

23.01 Determine what information is needed and the time that information is wanted for operation of the department.

23.02 Incorporate into initial program, bases such as room control, work schedules, staff level, days off roster and desired cleaning frequencies.

23.03 Establish levels on all supplies used by departments with cost analysis indicated.

23.04 Develop a project for a cleaning program.

23.05 Design a program for alternative work activities, chemical and supply usage information, and a project schedule for desired results.

23.06 Develop a departmental procedure manual program.

24.0 DEMONSTRATE INTERDEPARTMENTAL SKILLS--The student will be able to:

24.01 Maintain daily contact with nursing services as to their expectations and prospectives.

24.02 Maintain weekly contact with all other department heads as to their expectations and prospectives.

24.05 Accept suggestions from other department heads and act on them accordingly.

24.06 Use effective teamwork skills as a member of the team.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Human Services
Occupational Area: Health Science Education

PSV

CIP Number 0317.040600
Grade Level College Credits
Length AS Degree/65 credit hours, Generic/73 credit hours, Abused

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as human services specialists, human services workers, chemical dependence workers, substance abuse workers, or mental health workers, social service technicians, or human services workers (27308111) or to provide supplemental training for persons previously or currently employed in these occupations.

Education Option: Two tracks are offered:

Track I is a generic program to prepare mental health/human services practitioners. 65 credit hours.

Track II is a program designed for students who wish to be specially prepared to assist in helping those who have abused substances. 73 credit hours.

The content includes, but is not limited to, personal awareness, history and present status of mental health/human services movement, mental health/human services roles and functions, human growth and development, adaptive and maladaptive patterns of behavior, case management, various treatment modalities, therapeutic interventions, interpersonal communications, assessment, evaluation, abused substances pharmacology, information management, employability skills, health and safety, including CPR. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Clinical experiences are provided and may be in the form of practicums, internships, or apprenticeships.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Of special interest to those students in Track II will be obtaining certification by the Certification Board for Addiction Professionals of Florida (CAP and CAAP). National Accreditation is available from the Council for Standards on Human Service Education.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 73 credit hours for Track 2 and 65 credit hours for Track 1 according to Rule 6A-14.030.

Track I: Graduates will be eligible for employment as support personnel in vocational applications which assist those individuals suffering mental health deprivation and/or developmental disability toward wholeness.

Track II: This program builds on the counseling preparation required in Track I and requires education in an historical perspective on substance abuse, substance abuse prevention, the pharmacology of substances which are consciousness altering and subject to abuse, theories of addiction and causes of abuse, case record keeping, methods of intervention, identifying and using appropriate resources, current federal and state rules and regulations governing the treatment of individuals abusing consciousness altering substances, and the scope and limits of ethical expectations in the treatment of individuals abusing consciousness altering substances.

Graduates of the Associate degree in this program should be prepared for the oral and written examinations administered by the Certification Board for Addiction Professionals of Florida.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

HUMAN SERVICES TRACK I (12-21)

12.0 Demonstrate personal awareness skills.
13.0 Demonstrate knowledge of the mental health/human services system and how it affects practice and policy.
14.0 Demonstrate knowledge of mental health/human service work and the roles of the mental health/human service worker in various settings.
15.0 Demonstrate knowledge of human development from birth to senescence.
16.0 Demonstrate knowledge of adaptive and maladaptive patterns of behavior.
17.0 Demonstrate an understanding of and effective application of various treatment modalities and therapeutic interventions.
18.0 Demonstrate skills in interpersonal communication with clients, co-workers, and supervisors.
19.0 Demonstrate assessment, evaluation, problem-solving, and referral and crisis intervention skills.
20.0 Demonstrate knowledge of legal and ethical issues in practice.
21.0 Demonstrate skill in information management.

SUBSTANCE ABUSE INTERVENTION TRACK II (22-27) to be completed in addition to intended outcomes 12-20:

22.0 Demonstrate an understanding of the pharmacology of substances which have the effect of altering individual states of consciousness.

23.0 Demonstrate an understanding of the methods of identifying substance abuse.

24.0 Demonstrate a knowledge of the theories of addiction and the causes of abuse.

25.0 Demonstrate a knowledge of the history of substance abuse.

26.0 Demonstrate an understanding of the Federal and State regulations for the treatment and care of those seeking recovery from substance abuse.

27.0 Demonstrate an understanding of the ethical requirements and restrictions in treating individuals seeking recovery from substance abuse.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Human Services
Secondary Number:
Postsecondary Number: 0317.040600

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.

06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

HUMAN SERVICES TRACK I--This module prepares for the occupational completion point of human services specialists. Graduates will be eligible for employment as support personnel in vocational applications which assist towards wholeness for individuals suffering mental health deprivation and/or developmental disability.

12.0 DEMONSTRATE PERSONAL AWARENESS SKILLS--The student will be able to:

12.01 Use effective self-disclosure.
12.02 Identify and express own feelings congruently.
12.03 Demonstrate verbal responses denoting responsibility for self, ie "I" statements.
12.04 Demonstrate ability to engage in non-defensive self-exploration.
12.05 Assess with accuracy the impact of one's own needs, values, behaviors, motives and limitations on ones self and others.
12.06 Demonstrate genuineness, congruence, empathy, warmth, acceptance and respect.

13.0 DEMONSTRATE KNOWLEDGE OF THE MENTAL HEALTH/HUMAN SERVICES SYSTEM AND HOW IT AFFECTS PRACTICE AND POLICY--The student will be able to:

13.01 Relate mental health/human service trends, issues, laws and regulations to current practice.
13.02 Describe the Mental Health/Human Services system and tell how it may be accessed.

13.03 Describe the relationship of the Mental Health/Human Services system with the legal system.
13.04 Describe local community resources and referral processes.

14.0 DEMONSTRATE KNOWLEDGE OF MENTAL HEALTH/HUMAN SERVICE WORK AND THE ROLES OF THE MENTAL HEALTH/HUMAN SERVICE WORKER IN VARIOUS SETTINGS--The student will be able to:

14.01 Describe the role and function of the Mental Health/Human Service workers in inpatient, outpatient and other programs in the service delivery system.

14.02 Describe the role and functions of the potential mental health/human service workers with current and emergency target populations.

15.0 DEMONSTRATE KNOWLEDGE OF HUMAN DEVELOPMENT FROM BIRTH TO SENESCENCE--The student will be able to:

15.01 Describe each developmental stage and the associated developmental tasks.
15.02 Discuss the application of developmental stages and tasks to the roles and functions of the human service worker in the various delivery systems.

16.0 DEMONSTRATE KNOWLEDGE OF ADAPTIVE AND MALADAPTIVE PATTERNS OF BEHAVIOR--The student will be able to:

16.01 Demonstrate knowledge of terminology associated with mental disorders.
16.02 Demonstrate knowledge of major diagnostic categories.
16.03 Recognize various levels of adaptive and maladaptive behavior patterns and social functioning.
16.04 Demonstrate understanding of the addictive process and its physical psychological and emotional effects on the dependent individual and affected family.

17.0 DEMONSTRATE AN UNDERSTANDING OF AND EFFECTIVE APPLICATION OF VARIOUS TREATMENT MODALITIES AND THERAPEUTIC INTERVENTIONS--The student will be able to:

17.01 Identify with accuracy basic assumptions of intervention techniques associated with current major therapeutic approaches.
17.02 Utilize intervention techniques relative to the client and the setting.
17.03 Utilize group intervention techniques relative to group purpose and client population.
17.04 Plan and implement structured group experiences.
17.05 Recognize and assess the degree of severity in a crisis situation and demonstrate crisis intervention skills.
17.06 Demonstrate skills in the development and implementation of case management plans.

17.07 Demonstrate knowledge of psychotropic medications: actions, reactions.

18.0 DEMONSTRATE SKILLS IN INTERPERSONAL COMMUNICATION WITH CLIENTS, CO-WORKERS, AND SUPERVISORS--The student will be able to:

18.01 Use a one to one relationship with the client based on an understanding of psychodynamics.
18.02 Demonstrate sensitivity to clients' verbal and nonverbal communication.
18.03 Interact with clients in a way which communicates respect for the worth and uniqueness of each client and the clients' right to self-determination.
18.04 Obtain meaningful information leading to an appropriate intervention.
18.05 Establish effective working relationships with staff, supervisors, and community resource personnel.

19.0 DEMONSTRATE ASSESSMENT, EVALUATION, PROBLEM-SOLVING, AND REFERRAL SKILLS--The student will be able to:

19.01 Describe with accuracy client needs and identify current problems and precipitating events and behavioral consequences.
19.02 Describe with accuracy significant events in the client's personal and social history.
19.03 Demonstrate ability to make accurate observations and related assessments.
19.04 Demonstrate ability to develop, implement and monitor appropriate treatment goals and plans in ongoing or crisis situations.
19.05 Demonstrate ability to develop an appropriate discharge plan.
19.06 Recognize the measurement and assessment techniques used to evaluate intelligence, adaptive behavior, learning problems, affective characteristics.
19.07 Demonstrate recognition of when, where and how to refer clients to other professionals and/or community resources.

20.0 DEMONSTRATE KNOWLEDGE OF LEGAL AND ETHICAL ISSUES IN PRACTICE--The student will be able to:

20.01 Demonstrate knowledge of issues relating to client confidentiality, self-determination, and client rights and recourse in the mental health/human services delivery system.
20.02 Demonstrate ability to function as a part of the mental health/human service team.
20.03 Demonstrate knowledge of current legislation effecting client care.
20.04 Know and use a professional code of ethics relevant to mental health/human service work.

20.05 Recognize the limits of his/her competence and perform only those functions for which he/she is prepared.
20.06 Recognize the necessity of continued professional development and upgrading of skills.
21.09 Describe legal implications of charting and observational notes.

SUBSTANCE ABUSE INTERVENTION TRACK II - This module is an optional module that prepares mental health workers to work with persons who have practiced substance abuse. Track I must be completed in additional to Track II. The occupational completion point for this module is Substance Abuse Workers. Students in Track II will be obtaining certification by the Certification Board for Addiction Professionals of Florida (CAP and CAAP). National Accreditation is available from The Council for Standards on Human Service Education.

22.0 DEMONSTRATE AN UNDERSTANDING OF THE PHARMACOLOGY OF SUBSTANCES WHICH HAVE THE EFFECT OF ALTERING INDIVIDUAL STATES OF CONSCIOUSNESS--The student will be able to:

22.01 Identify and describe commonly abused substances.
22.02 List as exhaustively as possible the substances which current research shows to have behavior modifying effects.
22.03 Describe cross-addiction.
22.04 Describe drug interactions and drug half-life.
22.05 Identify the basic nutritional needs for a variety of body weights and behavioral activity.
22.06 Identify and describe medical effects of substance abuse not caused by drugs and alcohol.
22.07 Summarize the drug taxonomy.

23.0 DEMONSTRATE AN UNDERSTANDING OF THE METHODS OF IDENTIFYING SUBSTANCE ABUSE--The student will be able to:

23.01 Infer patterns of progression in substance abuse.
23.02 Distinguish the effects of substance abuse upon special populations including, but not limited to, women, adolescents, minorities according to identifiable populations, the elderly, and the military.
23.03 Assess the ways in which denial is revealed.
23.04 Evaluate the features of effects on family relationships caused by one or more members of the family being involved in substance abuse.
23.05 Explain the causal conditions and process of addiction.
23.06 Discuss the disease concept of alcoholism.
23.07 Discuss the phases of recovery and relapse.
23.08 Use the concept of substance abuse by defining the scope of the problem, discussing socio-cultural aspects of abuse, interpreting the effect of abused substances on the body, and determining the effect of substance abuse on behavior.

24.0 DEMONSTRATE A KNOWLEDGE OF THE THEORIES OF ADDICTION AND THE CAUSES OF ABUSE--The student will be able to:

24.01 Summarize various factors in substance abuse, including the dynamics of physiological addiction, the dynamics of emotional dependency, and the role of socio-cultural influences on behavior.
24.02 Explain the physical symptoms of substance abuse.
24.03 Explain the social symptoms of substance abuse.
24.04 Summarize the disease concept of behavior modification.
24.05 Summarize the genetic structure concept of behavior determination.
24.06 Summarize the neuro-physiological determinants of behavior.
24.07 Summarize the modes of emotional development in substance abuse.

25.0 DEMONSTRATE AN UNDERSTANDING OF THE HISTORY OF SUBSTANCE ABUSE--The student will be able to:

25.01 Discuss the changes that have occurred in the federal and state rules and regulations governing the identification, apprehension, and treatment of substance abusers.
25.02 Compare and contrast the stages of acceptable treatment for substance abusers, beginning in the 18th century to the present.
25.03 Identify and assess the changes in social attitudes toward the use of a variety of abused substances, both in the developed and developing countries of the world.
25.04 Discuss the technological and medical developments that have occurred in most recent treatment of individuals who have abused substances.
25.05 Evaluate the modern developments in the use of synthetic substances to treat normal illness.
25.06 Compare and contrast the psychological theories used to account for addiction.
25.07 Differentiate the psycho-sociological conditions which current perspectives on substance abuse associate with addiction.

26.0 DEMONSTRATE AN UNDERSTANDING OF THE FEDERAL AND STATE REGULATIONS FOR THE TREATMENT AND CARE OF THOSE SEEKING RECOVERY FROM SUBSTANCE ABUSE--The student will be able to:

26.01 Describe the salient features of Federal laws governing the use of indexed substances.
26.02 Distinguish State Rules and Regulations governing both the illicit use of drugs and the scope and limits of treatment for those abusing such substances.
26.03 Apply correctly the appropriate federal and/or state rule or regulation to case histories of treatment.

27.0 DEMONSTRATE AN UNDERSTANDING OF THE ETHICAL REQUIREMENTS AND RESTRICTIONS IN TREATING INDIVIDUALS SEEKING RECOVERY FROM SUBSTANCE ABUSE--The student will be able to:

27.01 Distinguish legal requirement from moral requirement.

27.02 Identify the categories of moral responsibility which arise out of legal requirements along with their specific sanctions.

27.03 Identify and evaluate conditions in which harm might be brought to a patient or client even when there are no legal sanctions restricting counselor/client (patient) relations.

27.04 Apply ethical reasoning to a broad range of case histories of specific counselor/client (patient) relations.

03170220CL July 1997

FLORIDA DEPARTMENT OF EDUCATION
CLUSTER CURRICULUM FRAMEWORK

Cluster Title: Imaging
Cluster Type: Job Preparatory
Occupational Area: Health Science Education
Components: Core, Seven Programs

	PSV	PSV-C
Grade Level:	College	College
Facility Code:	Not Applicable	
VSO:	HOSA	HOSA
Coop Method:	No	No
Apprenticeship:	No	No

I. **PURPOSE**: The purpose of the programs in this cluster is to prepare students for employment or advanced training in Diagnostic and Therapeutic Imaging. The programs in the cluster also provide supplemental training for persons previously or currently employed in these occupations.

This cluster of programs focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **CLUSTER STRUCTURE**: This cluster is a planned sequence of instruction consisting of the core, seven programs, & seven occupational completion points. When the recommended sequence is followed, the structure will allow students to complete specified portions of the program for employment or remain for advanced training. A student who completes the applicable competencies at any occupational completion point may either continue with the training program or become an occupational completer. This cluster meets the goals of TECH PREP and is based on the model developed by the Allied Health Articulation Task Force.

Students must complete the core, or demonstrate the mastery of skills standards contained in the core, before advancing in any of the programs:

RADIOGRAPHY

RADIATION THERAPY

RADIATION THERAPY SPECIALIST

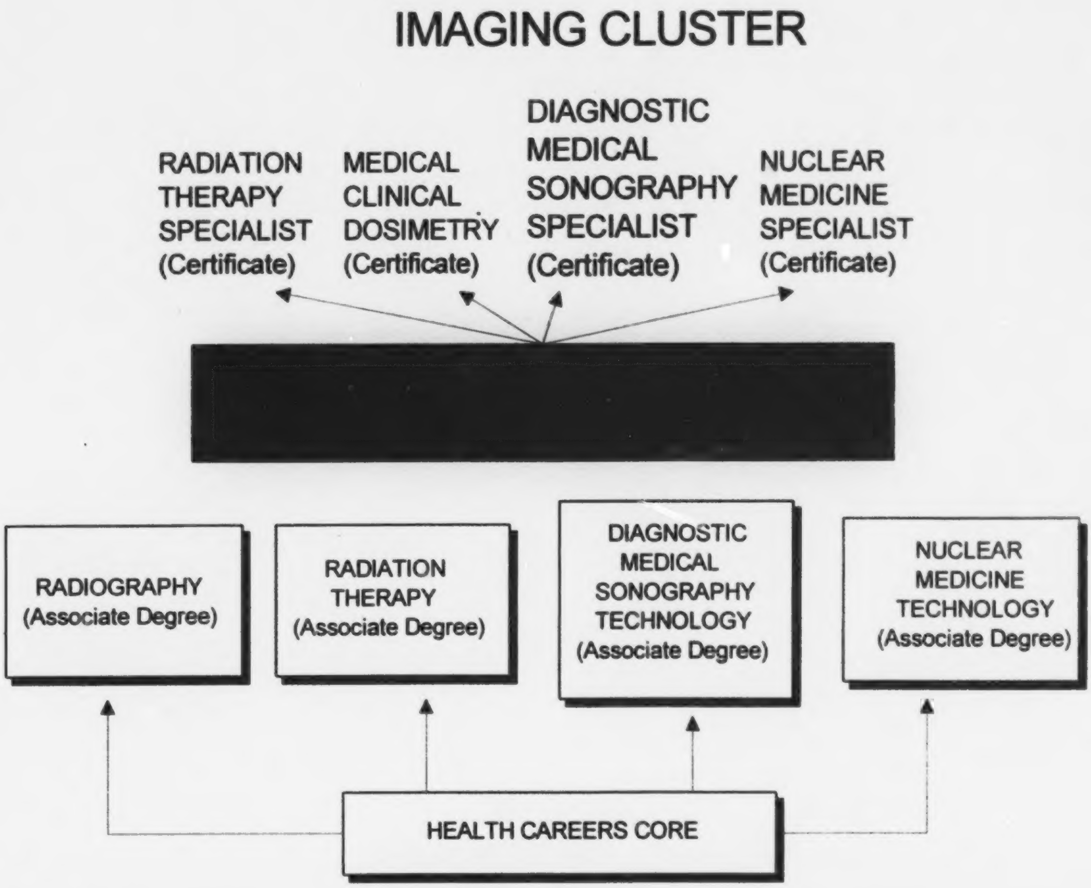
MEDICAL CLINICAL DOSIMETRY

NUCLEAR MEDICINE TECHNOLOGY

NUCLEAR MEDICINE TECHNOLOGY SPECIALIST

DIAGNOSTIC MEDICAL SONOGRAPHY TECHNOLOGY

DIAGNOSTIC MEDICAL SONOGRAPHY SPECIALIST


IMAGING CLUSTER
RADIATION THERAPY SPECIALIST (Certificate)
MEDICAL CLINICAL DOSIMETRY (Certificate)
DIAGNOSTIC MEDICAL SONOGRAPHY SPECIALIST (Certificate)
NUCLEAR MEDICINE SPECIALIST (Certificate)
RADIOGRAPHY (Associate Degree)
RADIATION THERAPY (Associate Degree)
DIAGNOSTIC MEDICAL SONOGRAPHY TECHNOLOGY (Associate Degree)
NUCLEAR MEDICINE TECHNOLOGY (Associate Degree)
HEALTH CAREERS CORE

III. **LABORATORY ACTIVITIES**: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program. The policies and process by which students receive clinical education shall be published and made known to all concerned in order to avoid practices in which students are substituted for paid staff. Students shall not take the responsibility or the place of qualified staff. After demonstrating competency, students may be permitted to perform procedures with indirect supervision.

IV. **SPECIAL NOTES**: Professional Imaging student organizations and/or Health Occupations Students of America, Inc.(HOSA), are the appropriate vocational student organizations for providing leadership training experience and for reinforcing specific vocational skills. Vocational Student Organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

SCANS Competencies: Instructional strategies for the programs in this cluster must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high- order thinking skills.

HIV/AIDS Education: The programs within the Diagnostic and Therapeutic Imaging cluster meet the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes.

Equipment List: A generic equipment list is available for the programs in this cluster and is printed in a supplement to this document.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Radiography
Occupational Area: Health Science

PSV

CIP Numbers 0317.020900
Grade Level College
Length Associate Degree/77 credit hours

I. **MAJOR CONCEPTS/CONTENT:** The purpose of this program is to prepare students for employment as Radiographers, Radiologic Technologists (32917224), (078.362-026) or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the:

Joint Review Committee on Education
in Radiologic Technology (JRCERT)
20 North Wacker Drive, Suite 900
Chicago, Illinois 60606-2901
(312) 704-5300

The program must also be approved by the Department of Health and Rehabilitative Services Office of Radiation Control so that the graduate is eligible for licensure in Florida as a Certified Radiologic Technologist. As specified in Chapter 468 Part IV and 10 D-74 F.A.C.

Radiographers provide patient services using imaging modalities, as directed by physicians qualified to order and/or perform radiologic procedures. Radiographers usually provide patient care essential to radiologic procedures, including exercising judgment when performing medical imaging procedures. When providing patient services, the radiographer adheres to the principles of radiation protection for the patient, self, and others.

Radiographers accurately demonstrate anatomical structures on various imaging receptors by knowledge of anatomy, positioning, radiographic technique, and radiation protection. Radiographers must also be able to recognize emergency patient conditions and initiate lifesaving first aid. Additional duties may include performing quality assurance, processing film, and keeping patient records. Radiographers may be required to perform some of these duties at the patient's bedside or in the operating room.

The content includes, but is not limited to, introduction to radiography, medical ethics and law, medical terminology, methods of patient care, human structure and function, radiographic procedures, principles of radiographic exposure, imaging equipment, radiographic film processing, evaluation of radiographs, radiation physics, principles of radiation protection, principles of radiation biology, radiographic pathology, introduction to quality assurance, introduction to computer literacy, and clinical education. The curriculum includes a plan for well-structured competency based clinical education.

II. **LABORATORY ACTIVITIES:** Clinical education and laboratory activities shall be supervised and include a clinical education center that offers a sufficient and well-balanced variety of radiographic examinations and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principles and procedures of image quality, their evaluation and assurance, and radiation protection; a valid plan for clinical assignments and rotations; opportunities may be provided for elective clinical rotations.

The policies and process by which students receive clinical education shall be published and made known to all concerned in order to avoid practices in which students are substituted for paid staff. Students shall not take the responsibility or the place of qualified staff. After demonstrating competency, students may be permitted to perform procedures with indirect supervision. Unsatisfactory radiographs shall be repeated only in the presence of a qualified radiographer.

III. **SPECIAL NOTE:** Program completers will be eligible to make an application to take the National Registry examination. For further information contact:

American Registry of Radiologic Technologists (ARRT)
1255 Northland Drive
St. Paul, MN 55120-1155
(612/687-0048).

Students are encouraged to become members of their appropriate professional organizations such as the American Society of Radiologic Technologists (ASRT), Florida Society of Radiologic Technologists (FSRT) and its' local affiliate.

The standard credit hour length for this program is 77 credit hours according to Rule 6A-14.030.

INTENDED OUTCOMES: After successfully completing the appropriate course(s) for this program, the student will be able to perform the following:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease

concepts.

05.0 Recognize and practice safety and security procedures.

06.0 Recognize and respond to emergency situations.

07.0 Recognize and practice infection control procedures.

08.0 Demonstrate computer literacy.

09.0 Demonstrate employability skills.

10.0 Demonstrate knowledge of blood borne diseases, including AIDS.

11.0 Apply basic math and science skills.

RADIOGRAPHY (12-18)

12.0 Techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor.Apply knowledge of anatomy, physiology, positioning and radiographic

13.0 Evaluate radiographic images for appropriate positioning and image quality.

14.0 Apply the principles of radiation protection for the patient, self and others.

15.0 Anticipate and provide patient care and comfort.

16.0 Perform quality assurance procedures.

17.0 Exercise independent judgment and discretion in the technical performance of medical imaging procedures.

18.0 Demonstrate proper operation of radiographic equipment and accessories.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Radiography
POSTSECONDARY NUMBER: 0317.020900

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

03.01 Discuss the legal framework of the health care occupation.

03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyrimid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.

11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

RADIOGRAPHY The intended outcomes (12-18) completes the occupational completion point of Radiography.

12.0 APPLY KNOWLEDGE OF ANATOMY, PHYSIOLOGY, POSITIONING AND RADIOGRAPHIC TECHNIQUES TO ACCURATELY DEMONSTRATE ANATOMICAL STRUCTURES ON A RADIOGRAPH OR OTHER IMAGING RECEPTOR The student will be able to:

12.01 Evaluate requisition for proper exam and/or patient.
12.02 Demonstrate knowledge of human anatomy, physiology, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph or other imaging receptor.
12.03 Position patient, utilizing body landmarks, to achieve the best demonstration of the affected body part by adjusting table, radiographic and/or fluoroscopic equipment, and image receptor using knowledge of anatomy, standard radiographic positions and departmental protocol.
12.04 To insure proper patient positioning during film exposure, use immobilization devices, when indicated, to prevent patient movement.
12.05 Give patient appropriate breathing instructions (e.g., inspiration, expiration) prior to making exposure.
12.06 When indicated, take scout radiograph(s) on trauma patients to determine the extent and nature of injury, and whether injury will permit standard examination procedures.
12.07 Remove all radiopaque materials (e.g., jewelry, hairpins, contrast materials) from patient and/or table that could interfere with the quality of the radiograph.

13.0 EVALUATE RADIOGRAPHIC IMAGES FOR APPROPRIATE POSITIONING AND IMAGE QUALITY -- The student will be able to:

13.01 Identify qualities that characterize a diagnostic radiograph.
13.02 Identify human structural landmarks and pathological conditions.
13.03 Identify incorrect image density, contrast, over/under exposures, artifacts, etc.
13.04 Recognize the effect of various patient conditions, equipment, accessories, and contrast media on radiographic quality.
13.05 Recognize legal, ethical, and professional responsibilities to patients, physicians, and co-workers.
13.06 Evaluate radiographic images for appropriate positioning and image quality.
13.07 If radiograph is not suitable, review procedural steps taken and modify as necessary.

14.0 APPLY THE PRINCIPLES OF RADIATION PROTECTION FOR THE PATIENT, SELF AND OTHERS -- The student will be able to:

14.01 Demonstrate knowledge of the principles of radiation protection for the patient, self and others.
14.02 Question female patients of child-bearing age about menstrual cycle and/or possible pregnancy to alert radiologist and/or referring physician.
14.03 When indicated place a gonadal shield over male and female reproductive organs prior to taking radiograph.
14.04 Stand behind lead barrier or wear a lead apron while activiting radiographic equipment.
14.05 Wear a monitoring device in the correct desugnated location while on duty to obtain a record of radiation exposure over a given period of time while operating radiographic equipment.
14.06 Place protective shield over radiosensitive organs (other than gonads) in or near the primary beam prior to exposure (ie: thyroid, eyes, etc.).
14.07 Remove all unnecessary persons from area prior to taking radiograph.
14.08 Restrict the beam to the area to be radiographed.
14.09 Explain the biological effects of ionizing radiation.

15.0 ANTICIPATE AND PROVIDE PATIENT CARE AND COMFORT -- The student will be able to:

15.01 Demonstrate knowledge required to anticipate and provide patient care and comfort.
15.02 Explain procedures to patient before beginning procedure.
15.03 Determine patients' identity using information on request form and confirm by checking wristband and/or by questioning patient.
15.04 Observe and/or question patient to determine if alternate radiographic projections are needed as well as any modifications that might be useful in the diagnosis.
15.05 Assist patient onto or off the table, stool or bed to avoid patient and personal injury using proper body mechanics and/or mechanical transfer devices.
15.06 Instruct patient about diet restrictions and/or self-administered preparatory medication or contrast agent relative to an examination.
15.07 Clean, wash, disinfect and/or sterilize facilities and equipment (e.g., cassettes, tabletops) and dispose of contaminated items prior to each patient to be radiographed.
15.08 Observe appropriate protective techniques when radiographing a patient in isolation to provide for effective infection control.
15.09 Use sterile and/or aseptic technique as required to help prevent infection.
15.10 Apply infection control techniques according to Center for Disease Control (CDC) guidelines.
15.11 Prior to injecting an iodinated contrast medium, elicit such information about the patient which might indicate a risk of a reaction using patient's chart, radiograph file jacket and/or by questioning patient.
15.12 Assist physician in the intravenous injection of contrast medium using appropriate aseptic technique.

15.13 After injection of iodinated constrast medium, observe patient to detect adverse reactions to the medium using knowledge of common reactions.
15.14 Introduce contrast medium (excluding intravenous injections) into patient according to procedure indicated by physician.
15.15 Recognize and report symptoms of abuse and neglect.

16.0 PERFORM QUALITY ASSURANCE PROCEDURES -- The student will be able to:

16.01 Demonstrate the knowledge required to perform basic quality assurance procedures.
16.02 Perform safety checks of radiographic equipment including table, tube and accessories.
16.03 Report malfunction in radiographic unit.
16.04 Clean screens and cassettes on a regular basis to remove dirt, paper or other artifacts.
16.05 Recognize and report malfunctions in the automatic processor.

17.0 EXERCISE INDEPENDENT JUDGMENT AND DISCRETION IN THE TECHNICAL PERFORMANCE OF MEDICAL IMAGING PROCEDURES The student will be able to:

17.01 Demonstrate the knowledge to exercise independent judgment and discretion in the technical performance of medical imaging procedures.
17.02 Select film, screen and/or grid combination appropriate for the part to be radiographed.
17.03 Restrict the beam to limit exposure to the area of interest to improve image quality.
17.04 Set appropriate kVp, mA and time for the radiographic unit to achieve optimal image quality and safe operating conditions.
17.05 Set appropriate kVp, mA, and time for the fluoroscopic and accessory imaging devices to achieve optimal image quality and safe operating conditions.

18.0 DEMONSTRATE PROPER OPERATION OF RADIOGRAPHIC EQUIPMENT AND ACCESSORIES -- The student will be able to:

18.01 Demonstrate the knowledge to properly operate radiographic equipment and accessories.
18.02 Warm-up x-ray tube to achieve proper operating conditions by following a prescribed sequence of steps.
18.03 Set appropriate kVp, mA and time (or if photo-timed, select appropriate kVp, mA, back-up time and photosensor) for the radiographic unit to achieve optimum image quality and safe operating conditions.
18.04 Utilize measuring calipers, technique charts and tube rating charts for selection of exposure factors.
18.05 Set appropriate kVp, mA, and time for the fluoroscopic and accessory imaging devices to achieve optimal image quality and safe operating conditions.
18.06 Store film in a manner which will reduce the possibility of accidentally exposing or re-exposing film.
18.07 Process film in a correct manner.

18.08 Reload cassettes by selecting film of proper size/type and place in designated area.

July, 1997

FLORIDA DEPARTMENT OF EDUCATION
CURRICULUM FRAMEWORK

Program Title:	RADIATION THERAPY PROGRAM
Occupational Area:	Health Science
	PSV
CIP Number:	0317.020901
Program Number:	0317.020901
Grade Level:	College Credits
Length:	Associate Degree/77 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as radiation therapists (078.362-026), or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the:
Joint Review Committee on Education
in Radiologic Technology (JRCERT)
20 North Wacker Drive, Suite 900
Chicago, Illinois 60606-2901
(312) 704-5300
to enable graduates to become candidates for examination in Radiation Therapy Technology by the American Registry of Radiologic Technologists. It may also be approved by the Department of Health and Rehabilitative Services, Office of Radiation Control so that the graduate is eligible for licensure in Florida as a certified Radiation Therapy Technologists. As specified in Chapter 468 Part IV and 10 D-74 F.A.C.

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Onocologist, uses ionizing radiation to treat disease. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform radiation therapy procedures with skill and understanding to practice the art and science of radiation therapy technology; to administer the prescribed radiation therapy treatments of the highest caliber, thereby providing the patient treatments of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient, to provide radiation protection to the patient, self and health care team; to work with the health care team to improve radiotherapeutic health care in the hospital and community; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

II. **LABORATORY/CLINICAL ACTIVITIES**: Radiation therapy centers which provide clinical experiences for students must meet the criteria for Major Cancer Management Centers published by the American College of Radiology. Students must be under the supervision of a qualified Radiation Therapist, and RTT (ARRT).
Clinical education has been established for the students in these programs. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical educationcomponent of the program. After completion of the prerequisite practice of radiotherapeutic procedures, students indicate readiness for evaluation in a specific category to the clinical affiliate or faculty
in the assigned clinical education center.

Clinical education and laboratory activities facilitate student rotations to provide them equitable opportunity to achieve the program clinical objective utilizing multiple affiliates. The resulting clinical rotation and laboratory practicum provides students with patient treatment techniques utilizing a variety of megavoltage equipment, radiation therapy patient care procedures, localization and treatment, radiation therapy physics including dosimetry, machine calibration, quality assurance, handling of sealed radioactive sources and protection, follow up, patient care and patient recordkeeping.

III. **SPECIAL NOTE**: Program completers will be eligible to make application to take the National Registry examination. For further information contact:

American Registry of Radiologic Technologists (ARRT)
1255 Northland Drive
St. Paul, MN 55120-1155
(612/687-0048).

Students are encouraged to become members of their appropriate professional organizations such as the American Society of Radiologic Technologists (ASRT), Florida Society of Radiologic Technologists (FSRT) and its' local affiliate.

The standard credit hour length for this program is 77 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01. Demonstrate knowledge of the health care delivery system and health occupations.
02. Demonstrate the ability to communicate and use interpersonal skills effectively.
03. Demonstrate legal and ethical responsibilities.
04. Demonstrate an understanding of and apply wellness and disease concepts.
05. Recognize and practice safety and security procedures.

06. Recognize and respond to emergency situations.
07. Recognize and practice infection control procedures.
08. Demonstrate computer literacy.
09. Demonstrate employability skills.
10. Demonstrate knowledge of blood borne diseases, including AIDS.
11. Apply basic math and science skills.

RADIATION THERAPY (12-23)

12. Deliver a planned course of radiation therapy.
13. Verify the mathematical accuracy of the prescription.
14. Maintain daily records and document technical details of the treatment administered.
15. Observe the clinical progress of the patient undergoing radiation therapy; recognize the first signs of any complication; and determine when treatment should be withheld until a physician may be consulted.
16. Provide patient care and comfort essential to radiation therapy procedures.
17. Detect equipment malfunctions; report same to the proper authority; and know the safe limits of equipment operation.
18. Apply the rules and regulations for radiation safety; detect any radiation hazards; and maintain control in the event of a radiation accident.
19. Understand the function of equipment and utilize equipment to its full potential.
20. Demonstrate the use of all treatment accessories.
21. Construct immobilization and beam-directional devices and prepare brachytherapy molds.
22. Assist in the preparation of brachytherapy sources.
23. Assist the physicist in calibration of equipment and in treatment planning procedures.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Radiation Therapy
POSTSECONDARY NUMBER: 0317.020901

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyrimid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire safety and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS skills of basic rescuer or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

RADIATION THERAPY The intended outcomes(12-23) completes the occupational completion point of Radiation Therapy.

12.0 DELIVER A PLANNED COURSE OF RADIATION THERAPY -- The student will be able to:

12.01 Orient patient to the planned treatment procedure and give emotional support.
12.02 Identify patient scheduled for treatment by arm band, photograph, or verbally and help patient onto and off the treatment table with the aid of assistants, when necessary, using proper body mechanics to avoid injury to patient or technologist.
12.03 Position patient to reproduce set-up indicated in the treatment chart, using positioning aids and immobilization devices.
12.04 Position treatment machine to reproduce set-up indicated by the approved treatment plan.
12.05 Set appropriate controls on treatment machine console (e.g., modality, energy, monitor units, time) and activate machine to deliver prescribed treatment indicated on treatment plan.
12.06 Discuss with physician any questions concerning patient's prescription.

13. 0VERIFY THE MATHEMATICAL ACCURACY OF THE PRESCRIPTION The student will be able to:

13.01 Calculate the number of monitor units/exposure time for each treatment session to achieve the prescribed dose indicated by the physician, taking into account such factors as the energy of the beam, number of and orientation of the beam(s), SSD or SAD, depth of tumor, patient thickness, size and shape of portal, use of wedges, et cetera.

13.02 Record factors used in the calculation of monitor units/exposure time onto treatment chart to allow checking of calculations for correctness.

13.03 Recognize if proposed treatment plan appears to deliver inappropriate dose to critical structures in order to alert the physician.

14.0 MAINTAIN DAILY RECORDS AND DOCUMENT TECHNICAL DETAILS OF THE TREATMENT ADMINISTERED -- The student will be able to:

14.01 Obtain and process verification radiographs for documentation of accuracy of field position.

14.02 Set up preliminary treatment field and take a radiograph with the field marked by collimator wires, solder wire, or lead ladders taped to the patient's skin.

14.03 Record information on treatment chart, describing the conditions used in the simulation, to aid in their reproduction (e.g., patient position, technique and positioning devices) on the treatment machine.

15.0 OBSERVE THE CLINICAL PROGRESS OF THE PATIENT UNDERGOING RADIATION THERAPY; RECOGNIZE THE FIRST SIGNS OF ANY COMPLICATION; AND DETERMINE WHEN TREATMENT SHOULD BE WITHHELD UNTIL A PHYSICIAN MAY BE CONSULTED -- The student will be able to:

15.01 When requested, measure and record vital signs (blood pressure, respiratory rate, pulse rate and temperature).

15.02 Schedule patient for blood studies and record result (e.g., platelets, WBC, PVC, [HCT]) on treatment chart to provide record of effects of radiation on patient during course of treatment, and report abnormal results to physician.

15.03 Observe and/or question patient regarding nutritional status offering dietary hints or referring patient to appropriate personnel for management.

15.04 Observe and question patient about any side effects or problems he/she may be experiencing, and notify physician.

16.0 PROVIDE PATIENT CARE AND COMFORT ESSENTIAL TO RADIATION THERAPY PROCEDURES -- The student will be able to:

16.01 Answer patient's questions regarding treatment related topics or refer to the physician when inappropriate for the therapist to answer.

16.02 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen tanks) to avoid endangering the patient during the therapy procedure using knowledge of such hospital apparatus.

16.03 Educate patient concerning proper skin care of treatment area(s).

16.04 Clean, wash, disinfect and/or sterilize facility and equipment, and dispose of contaminated items in preparation for next patient.

17.0 DETECT EQUIPMENT MALFUNCTIONS; REPORT SAME TO THE PROPER AUTHORITY, AND KNOW THE SAFE LIMITS OF EQUIPMENT OPERATION -- The student will be able to:

17.01 Warm up treatment machines and/or simulators and check all safety and operation procedures according to manufacturer's operating manual for possible malfunction.
17.02 Monitor console of treatment machine to spot any malfunctioning of equipment during treatment using indicators on machine, and take appropriate action when necessary to assure safety of patient and personnel.
17.03 Maintain treatment machines and accessories to minimize necessary interruptions in treatment due to mechanical breakdown.

18.0 APPLY THE RULES AND REGULATIONS FOR RADIATION SAFETY; DETECT ANY RADIATION HAZARDS; AND MAINTAIN CONTROL IN THE EVENT OF RADIATION ACCIDENT -- The student will be able to:

18.01 Wear a monitoring device while on duty to obtain a personal record of radiation exposure over a period of time.
18.02 Protect workers and others in the area from radiation exposure by closing door to treatment room to activate interlock.
18.03 Monitor patient visually (directly or indirectly) and by intercommunication system to insure patient's safety and accuracy of treatment.

19.0 UNDERSTAND THE FUNCTION OF EQUIPMENT AND UTILIZE EQUIPMENT TO ITS FULL POTENTIAL -- The student will be able to:

19.01 Position patient on simulator table in proper orientation to the simulator using positioning aids and immobilization devices.
19.02 Assist physician in localizing tumor volume and critical organs using radiographic techniques, with or without contrast media.
19.03 Process films to produce finished radiographs and have physician approve treatment (field) area indicated in film.

20.0 DEMONSTRATE THE USE OF ALL TREATMENT ACCESSORIES -- The student will be able to:

20.01 Assist physician with the physical examinations of patients (e.g., preparing patient, examination room, instruments).

20.02 Assist physician in determining optimum fields to cover volume of interest utilizing knowledge of shape of field, gantry angle, blocks, et cetera.

20.03 Take contours of body parts for use in treatment planning using methods or materials such a solder wire, pin device, pantograph, CT, et cetera.

21.0 CONSTRUCT IMMOBILIZATION AND BEAM DIRECTIONAL DEVICES AND PREPARE BRACHYTHERAPY MOLDS -- The student will be able to:

21.01 When procedure requires, manufacture individualized immobilization devices to aid in the replication of the treatment set-up (e.g., bite blocks, molds, plaster shells).

21.02 When appropriate, measure and record information necessary to fabricate blocks or accessories required for treatment.

21.03 Prepare custom blocks for use in shaping treatment field by cutting lead blocks or using molten metal techniques.

22.0 ASSIST IN THE PREPARATION OF BRACHYTHERAPY SOURCES -- The student will be able to:

22.01 Take placement radiographs of implants to be used in dose calculation and placement verification according to protocol.

22.02 Assist with measurement and recording of the necessary parameters for calculation of the dose to be delivered.

22.03 Assist with brachytherapy using knowledge of radionuclides employed and interstitial and intracavitary applications as integrated into the patient treatment plan.

23.0 ASSIST THE PHYSICIST IN CALIBRATION OF EQUIPMENT AND IN TREATMENT PLANNING PROCEDURES -- The student will be able to:

23.01 Check dose rate by measuring radiation dose reading at standard distance and standard conditions,, and then compare with proper standard using appropriate radiation measuring devices (e.g., Victoreen Timble Chamber).

23.02 Perform light field test on treatment machine to check alignment of collimator light and cross hairs with treatment beam by setting a standard field size, exposing a radiograph and physically measuring the field size recorded on the radiograph.

23.03 Check rotation by setting gantry so it goes through complete arc.

July 1997

FLORIDA DEPARTMENT OF EDUCATION
CURRICULUM FRAMEWORK

Program Title: RADIATION THERAPY SPECIALIST
Occupational Area: Health Science

PSV-C

CIP Number	0317020903
Program Number	0317020903
Grade Level	College Credits
Length	Certificate

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as radiation therapists specialists (078.362-026), or to provide supplemental training for persons previously or presently employed in these occupations.

The program must be accredited by the:

Joint Review Committee on Education
in Radiologic Technology (JRCERT)
20 North Wacker Drive, Suite 900
Chicago, Illinois 60606-2901
(312) 704-5300

to enable graduates to become candidates for examination in Radiation Therapy Technology by the American Registry of Radiologic Technologists. It may also be approved by the Department of Health and Rehabilitative Services, Office of Radiation Control so that the graduate is eligible for licensure in Florida as a certified Radiation Therapy Technologists. As specified in Chapter 468 Part IV and 10 D-74 F.A.C.

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Oncologist, uses ionizing radiation to treat disease. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform radiation therapy procedures with skill and understanding to practice the art and science of radiation therapy technology; to administer the prescribed radiation therapy treatments of the highest caliber, thereby providing the patient treatments of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient, to provide radiation protection to the patient, self and health care team; to work with the health care team to improve radiotherapeutic health care in the hospital and community; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

II. **LABORATORY/CLINICAL ACTIVITIES**: Radiation therapy centers which provide clinical experiences for students must meet the criteria for Major Cancer Management Centers published by the American College of Radiology. Students must be under the supervision of a qualified Radiation Therapist, RTT (ARRT) and radiation therapist.

Clinical education has been established for the students in these programs. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical education component of the program. After completion of the prerequisite practice of radiotherapeutic procedures, students indicate readiness for evaluation in a specific category to the clinical affiliate or faculty in the assigned clinical education center.

Clinical education and laboratory activities facilitate student rotations to provide them equitable opportunity to achieve the program clinical objective utilizing multiple affiliates. The resulting clinical rotation and laboratory practicum provides students with patient treatment techniques utilizing a variety of megavoltage equipment, radiation therapy patient care procedures, localization and treatment, radiation therapy physics including dosimetry, machine calibration, quality assurance, handling of sealed radioactive sources and protection, follow up, patient care and patient recordkeeping.

III. **SPECIAL NOTE**: The designation of PSV-C requires that the student have an associate degree in a related field of study (ie radiologic technology, etc). Upon the successful completion of the program the student will receive a Radiation Therapy Specialist Certificate.

Program completers will be eligible to make application to take the National Registry examination. For further information contact:

American Registry of Radiologic Technologists (ARRT)
1255 Northland Drive
St. Paul, MN 55120
(612/687-0048).

Students are encouraged to become members of their appropriate professional organizations such as the American Society of Radiologic Technologists (ASRT), Florida Society of Radiologic Technologists (FSRT) and its' local affiliate.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01. Demonstrate knowledge of the health care delivery system and health occupations.

02. Demonstrate the ability to communicate and use interpersonal skills effectively.
03. Demonstrate legal and ethical responsibilities.
04. Demonstrate an understanding of and apply wellness and disease concepts.
05. Recognize and practice safety and security procedures.
06. Recognize and respond to emergency situations.
07. Recognize and practice infection control procedures.
08. Demonstrate computer literacy.
09. Demonstrate employability skills.
10. Demonstrate knowledge of blood borne diseases, including AIDS.
11. Apply basic math and science skills.

RADIATION THERAPY SPECIALIST(12-23)

12. Deliver a planned course of radiation therapy.
13. Verify the mathematical accuracy of the prescription.
14. Maintain daily records and document technical details of the treatment administered.
15. Observe the clinical progress of the patient undergoing radiation therapy; recognize the first signs of any complication; and determine when treatment should be withheld until a physician may be consulted.
16. Provide patient care and comfort essential to radiation therapy procedures.
17. Detect equipment malfunctions; report same to the proper authority; and know the safe limits of equipment operation.
18. Apply the rules and regulations for radiation safety; detect any radiation hazards; and maintain control in the event of a radiation accident.
19. Understand the function of equipment and utilize equipment to its full potential.
20. Demonstrate the use of all treatment accessories.
21. Construct immobilization and beam-directional devices and prepare brachytherapy molds.
22. Assist in the preparation of brachytherapy sources.
23. Assist the physicist in calibration of equipment and in treatment planning procedures.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Radiation Therapy Specialist
POSTSECONDARY NUMBER: 0317.020903

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

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01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
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01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

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02.10 Demonstrate telephone usage including taking messages.
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03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
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04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyrimid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire safety and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS skills of basic rescuer or higher.

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06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

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09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 alculate ratios.

RADIATION THERAPY SPECIALIST The intended outcomes (12-23) completes the occupational completion point of Radiation Therapy Specialist.

12.0 DELIVER A PLANNED COURSE OF RADIATION THERAPY -- The student will be able to:

12.01 Orient patient to the planned treatment procedure and give emotional support.
12.02 Identify patient scheduled for treatment by arm band, photograph, or verbally and help patient onto and off the treatment table with the aid of assistants, when necessary, using proper body mechanics to avoid injury to patient or technologist.
12.03 Position patient to reproduce set-up indicated in the treatment chart, using positioning aids and immobilization devices.
12.04 Position treatment machine to reproduce set-up indicated by the approved treatment plan.
12.05 Set appropriate controls on treatment machine console (e.g., modality, energy, monitor units, time) and activate machine to deliver prescribed treatment indicated on treatment plan.
12.06 Discuss with physician any questions concerning patient's prescription.

13. 0VERIFY THE MATHEMATICAL ACCURACY OF THE PRESCRIPTIO-- The student will be able to:

13.01 Calculate the number of monitor units/exposure time for each treatment session to achieve the prescribed dose indicated by the physician, taking into account such factors as the energy of the beam, number of and orientation of the beam(s), SSD or SAD, depth of tumor, patient thickness, size and shape of portal, use of wedges, et cetera.

13.02 Record factors used in the calculation of monitor units/exposure time onto treatment chart to allow checking of calculations for correctness.

13.03 Recognize if proposed treatment plan appears to deliver inappropriate dose to critical structures in order to alert the physician.

14.0 MAINTAIN DAILY RECORDS AND DOCUMENT TECHNICAL DETAILS OF THE TREATMENT ADMINISTERED -- The student will be able to:

14.01 Obtain and process verification radiographs for documentation of accuracy of field position.

14.02 Set up preliminary treatment field and take a radiograph with the field marked by collimator wires, solder wire, or lead ladders taped to the patient's skin.

14.03 Record information on treatment chart, describing the conditions used in the simulation, to aid in their reproduction (e.g., patient position, technique and positioning devices) on the treatment machine.

15.0 OBSERVE THE CLINICAL PROGRESS OF THE PATIENT UNDERGOING RADIATION THERAPY; RECOGNIZE THE FIRST SIGNS OF ANY COMPLICATION; AND DETERMINE WHEN TREATMENT SHOULD BE WITHHELD UNTIL A PHYSICIAN MAY BE CONSULTED -- The student will be able to:

15.01 When requested, measure and record vital signs (blood pressure, respiratory rate, pulse rate and temperature).

15.02 Schedule patient for blood studies and record result (e.g., platelets, WBC, PVC, [HCT]) on treatment chart to provide record of effects of radiation on patient during course of treatment, and report abnormal results to physician.

15.03 Observe and/or question patient regarding nutritional status offering dietary hints or referring patient to appropriate personnel for management.

15.04 Observe and question patient about any side effects or problems he/she may be experiencing, and notify physician.

16.0 PROVIDE PATIENT CARE AND COMFORT ESSENTIAL TO RADIATION THERAPY PROCEDURES -- The student will be able to:

16.01 Answer patient's questions regarding treatment related topics or refer to the physician when inappropriate for the therapist to answer.

16.02 Maintain accessory medical equipment attached to patient (e.g., IVs, oxygen tanks) to avoid endangering the patient during the therapy procedure using knowledge of such hospital apparatus.

16.03 Educate patient concerning proper skin care of treatment area(s).

16.04 Clean, wash, disinfect and/or sterilize facility and equipment, and dispose of contaminated items in preparation for next patient.

17.0 DETECT EQUIPMENT MALFUNCTIONS; REPORT SAME TO THE PROPER AUTHORITY, AND KNOW THE SAFE LIMITS OF EQUIPMENT OPERATION -- The student will be able to:

17.01 Warm up treatment machines and/or simulators and check all safety and operation procedures according to manufacturer's operating manual for possible malfunction.
17.02 Monitor console of treatment machine to spot any malfunctioning of equipment during treatment using indicators on machine, and take appropriate action when necessary to assure safety of patient and personnel.
17.03 Maintain treatment machines and accessories to minimize necessary interruptions in treatment due to mechanical breakdown.

18.0 APPLY THE RULES AND REGULATIONS FOR RADIATION SAFETY; DETECT ANY RADIATION HAZARDS; AND MAINTAIN CONTROL IN THE EVENT OF RADIATION ACCIDENT -- The student will be able to:

18.01 Wear a monitoring device while on duty to obtain a personal record of radiation exposure over a period of time.
18.02 Protect workers and others in the area from radiation exposure by closing door to treatment room to activate interlock.
18.03 Monitor patient visually (directly or indirectly) and by intercommunication system to insure patient's safety and accuracy of treatment.

19.0 UNDERSTAND THE FUNCTION OF EQUIPMENT AND UTILIZE EQUIPMENT TO ITS FULL POTENTIAL -- The student will be able to:

19.01 Position patient on simulator table in proper orientation to the simulator using positioning aids and immobilization devices.
19.02 Assist physician in localizing tumor volume and critical organusing radiographic techniques, with or without contrast media.
19.03 Process films to produce finished radiographs and have physician approve treatment (field) area indicated in film.

20.0 DEMONSTRATE THE USE OF ALL TREATMENT ACCESSORIES -- The student will be able to:

20.01 Assist physician with the physical examinations of patients (e.g., preparing patient, examination room, instruments).

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21.0 CONSTRUCT IMMOBILIZATION AND BEAM DIRECTIONAL DEVICES AND PREPARE BRACHYTHERAPY MOLDS -- The student will be able to:

21.01 When procedure requires, manufacture individualized immobilization devices to aid in the replication of the treatment set-up (e.g., bite blocks, molds, plaster shells).

21.02 When appropriate, measure and record information necessary to fabricate blocks or accessories required for treatment.

21.03 Prepare custom blocks for use in shaping treatment field by cutting lead blocks or using molten metal techniques.

22.0 ASSIST IN THE PREPARATION OF BRACHYTHERAPY SOURCE -- The student will be able to:

22.01 Take placement radiographs of implants to be used in dose calculation and placement verification according to protocol.

22.02 Assist with measurement and recording of the necessary parameters for calculation of the dose to be delivered.

22.03 Assist with brachytherapy using knowledge of radionuclides employed and interstitial and intracavitary applications as integrated into the patient treatment plan.

23.0 ASSIST THE PHYSICIST IN CALIBRATION OF EQUIPMENT AND IN TREATMENT PLANNING PROCEDURES -- The student will be able to:

23.01 Check dose rate by measuring radiation dose reading at standard distance and standard conditions,, and then compare with proper standard using appropriate radiation measuring devices (e.g., Victoreen Timble Chamber).

23.02 Perform light field test on treatment machine to check alignment of collimator light and cross hairs with treatment beam by setting a standard field size, exposing a radiograph and physically measuring the field size recorded on the radiograph.

23.03 Check rotation by setting gantry so it goes through complete arc.

JULY 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	MEDICAL CLINICAL DOSIMETRY
Occupational Area:	Health Science Education
	PSV-C
Program Numbers	0317.020701
CIP Numbers	0317.020701
Grade Level	College
Length	Certificate

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as dosimetrist, or provide supplemental training for persons previously or presently employed in a related imaging occupation (i.e. radiologic technology, radiation therapy, etc.).

The program is designed to provide the radiation therapy community with workers who, under the supervision of a Radiation Oncologist and/or Physicist, aids in the treatment of disease with ionizing radiation. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory.

The program will enable students to perform clinical dosimetry procedures with skill and understanding to practice the art of radiation therapy as a modality of treatment; to aid in development and implementation of a plan of treatment prescribed by the Radiation Therapist which will deliver treatments of the highest caliber, thereby providing the patient treatment planning of the highest quality and accuracy; to become members of the health care team that contributes to the physical and psychological comfort of the patient; to provide radiation protection to the patient, self and health care team; to provide a system of quality assurance for both equipment and treatment delivery; to design and fabricate specialized treatment aids necessary to offer state-of-the-art treatments; to assist the Physicist in the detection of erratic performance of equipment; to assist the Radiation Therapist in the preparation and administration of internal (brachytherapy) radiation therapy treatments, to work with the health care team to improve radiotherapeutic health care in the hospital and community; to manage personnel and the daily routine functions associated with a radiation therapy department; and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of radiation therapy.

II. **LABORATORY/INTERN ACTIVITIES**: Radiation therapy centers which provide clinical internship experiences for students to practice state-of-the-art radiation therapy technology. Students must be under the supervision of a qualified Radiation Therapy Physicist or Dosimetrist.

Clinical education or internship has been established for students in this program. It is designed to permit accurate assessment of the knowledge, skills and abilities of students in the clinical intern component of the program. After completion of the prerequisite practice of clinical internship in dosimetry procedures, students indicate to the faculty his/her readiness for evaluation of competence in a specific competency category/procedure.

Multiple affiliates are utilized for the clinical internship activities which provide equitable opportunities for the student to achieve the program clinical objectives. The resulting clinical internship rotations provide students with the techniques of dosimetry for the delivery of treatments utilizing a variety of megavoltage equipment, simulation and localization, machine calibration, quality assurance, radiation protection, preparation and handling of brachytherapy sources and systems of documentation and verification.

III. **SPECIAL NOTE**: The designation of PSV-C requires that the student have an associate degree in a related field of study (ie radiologic technology, radiation therapy, etc). Upon the successful completion of the program the student will receive a certificate in Medical Clinical Dosimetry.

Students are encouraged to become members of their appropriate professional organizations such as the American Society of Radiologic Technologists (ASRT), Florida Society of Radiologic Technologists (FSRT) and its' local affiliate.

Student membership in the professional organization, American Association of Medical Dosimetrists, is encouraged.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01. Demonstrate knowledge of the health care delivery system and health occupations.
02. Demonstrate the ability to communicate and use interpersonal skills effectively.
03. Demonstrate legal and ethical responsibilities.
04. Demonstrate an understanding of and apply wellness and disease concepts.
05. Recognize and practice safety and security procedures.
06. Recognize and respond to emergency situations.
07. Recognize and practice infection control procedures.
08. Demonstrate computer literacy.
09. Demonstrate employability skills.
10. Demonstrate knowledge of blood borne diseases, including AIDS.
11. Apply basic math and science skills.

MEDICAL CLINICAL DOSIMETRY (12-23)

12. Discuss the patient's diagnosis with the Radiation Therapist and what he/she wishes to achieve by irradiation.

13. Supervise or accomplish simulation and localization of the treatment volume by topographical landmarks and verification (portal) filming and prepare the contour or contours for the patient.
14. Prepare daily set-up sheets detailing information relating to dose, daily dose per field, field weighting, wedges, shielding, etc. and to prepare final chart check and dosage summary after completion of therapy for presentation to the Radiation Therapist.
15. Apply isodose charts or computer to the treatment problem to produce a treatment plan or plans for presentation to the Radiation Therapist.
16. Calculate, using hand or computer, the setting necessary to accomplish the treatment plan as approved by the Radiation Therapist.
17. Supervise or accomplish planning for special procedures; skin compensatory filters; field separation; cutting custom designed blocks; construction of wedge filters; construction of other shielding devices.
18. Supervise mold room techniques including immobilization casts.
19. Responsible for quality control and accurate beam alignment in all patient set-ups.
20. Function as an assistant Radiation Therapist and Physicist in intracavitary/interstitial implant procedures and prepare the dose calculation for these.
21. Assist the Radiation Therapy Physicist in calibration procedures, detection of erratic performance of equipment, and in the organization and maintenance of the radiation protection program.
22. Be responsible for "in vivo" dosimetry.
23. Work with the Radiation Therapist and Physicist with the implementation of new techniques of radiation therapy.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: MEDICAL CLINICAL DOSIMETRY PROGRAM
POSTSECONDARY NUMBER: 0317.020701

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.

03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyrimid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire safety and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS skills of basic rescuer or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.

07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.

11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

MEDICAL CLINICAL DOSIMETRY The intended outcomes (12-23) completes the occupational completion point of Medical Clinical Dosimetry.

12.0 DISCUSS THE PATIENT'S DIAGNOSIS WITH THE RADIATION ONCOLOGIST AND WHAT HE/SHE WISHES TO ACHIEVE BY IRRADIATION
-- The student will be able to:

12.01 Identify the anatomical location of the treatment volume and the surrounding normal structures.
12.02 Verify the treatment modality and unit, field size, blocking, dosage of critical organs and the treatment volume and any other specialized treatment aids.

13.0 SUPERVISE OR ACCOMPLISH SIMULATION AND LOCALIZATION OF THE TREATMENT VOLUME BY TOPOGRAPHICAL LANDMARKS AND VERIFICATION (PORTAL) FILMING AND PREPARE THE CONTOUR OR CONTOURS FOR THE PATIENT
-- The student will be able to:

13.01 Outline the plan of treatment to the Radiation Therapy Technologist.
13.02 Identify the patient and orient the patient as to the intent of the procedure.
13.03 Position the patient in the optimum position for accomplishment of the planned method of treatment.
13.04 Ensure placement of any treatment accessories and documentation of their use in the set-up sheet.
13.05 Position equipment to localize and delineate the desired treatment volume with necessary markers.
13.06 Perform localization procedures as required.
13.07 Obtain the Radiation Therapist approval for the optimum treatment plan as outlined on the simulation film.
13.08 Obtain a radiograph of the treatment volume as approved by the Radiation Therapist.

14.0 PREPARE DAILY SET-UP SHEETS DETAILING INFORMATION RELATING TO DOSE, DAILY DOSE PER FIELD, FIELD WEIGHTING, WEDGES, SHIELDING, ETC. AND TO PREPARE FINAL CHART CHECK AND DOSAGE SUMMARY AFTER COMPLETION OF THERAPY FOR PRESENTATION TO THE RADIATION THERAPIST
-- The student will be able to:

14.01 Record the approved treatment information, such as the anatomical description, equipment and modality, SSD/SAD, field size, type of blocking, treatment depth, daily fraction, gantry angle, any special instructions and film.

15.0 APPLY ISODOSE CHARTS OR COMPUTER TO THE TREATMENT PROBLEM TO PRODUCE A TREATMENT PLAN OR PLANS FOR PRESENTATION TO THE RADIATION THERAPIST
-- The student will be able to:

15.01 Select the appropriate beam information according to the equipment and modality, SSD/SAD, field size, gantry angle, blocking, technique and any other special treatment aids.
15.02 Perform isodose distribution for the treatment plan or plans.
15.03 Obtain approval from the Radiation Therapist.
15.04 Document the approved treatment plan.

16.0 CALCULATE, USING HAND OR COMPUTER, THE SETTING NECESSARY TO ACCOMPLISH THE TREATMENT PLAN AS APPROVED BY THE RADIATION THERAPIST -- The student will be able to:

16.01 Select the appropriate beam information according to equipment and modality, SSD/SAD, field size, gantry angle, blocking, technique and any other special treatment aids.
16.02 Generate the appropriate factors to perform the calculation, i.e., Output Factor, TMR, % depth dose, TAR, SAR, wedge factor, etc..
16.03 Obtain the final setting to be used in treatment delivery.
16.04 Obtain a verification of the calculation by the Physicist.
16.05 Document the calculation.

17.0 SUPERVISE OR ACCOMPLISH PLANNING FOR SPECIAL PROCEDURES; SKIN COMPENSATORY FILTERS; FIELD SEPARATION; CUTTING CUSTOM DESIGNED BLOCKS; CONSTRUCTION OF WEDGE FILTERS; CONSTRUCTION OF OTHER SHIELDING DEVICES -- The student will be able to:

17.01 Perform irregular field calculations for blocked fields.
17.02 Perform field separation or gap calculation for adjacent fields.
17.03 Fabricate lead equivalent shielding blocks as prescribed by the Radiation Therapist.
17.04 Fabricate compensating filters as required.
17.05 Fabricate skin compensating materials (bolus).
17.06 Fabricate other shielding devices such as lead shielding cut outs.
17.07 Document the use of the treatment aid.

18.0 SUPERVISE, MOLD ROOM TECHNIQUES INCLUDING IMMOBILIZATION CASTS -- The student will be able to:

18.01 Fabricate immobilization devices which may be made of plaster casting material, fiberglass material or perspex.
18.02 Document the use of the immobilization device.

19.0 RESPONSIBLE FOR QUALITY CONTROL AND ACCURATE BEAM ALIGNMENT IN ALL PATIENT SET-UPS -- The student will be able to:

19.01 Develop and maintain a system of quality assurance checks each morning on all treatment units.
19.02 Perform QA checks and document the results.
19.03 Inform the Physicist of any equipment inconsistency from the specified values.
19.04 Inform the Radiation Therapist of any dosage errors.

20.0 FUNCTION AS AN ASSISTANT TO THE RADIATION ONCOLOGIST AND PHYSICIST IN INTRACAVITARY/INTERSTITIAL IMPLANT PROCEDURES AND PREPARE THE DOSE CALCULATION FOR THESE -- The student will be able to:

20.01 Prepare the applicator for sterilization and delivery to the implant location.
20.02 Monitor any implants necessary, i.e., iodine 125.
20.03 Assist the Radiation Therapist in the placement of the applicator.
20.04 Perform or supervise the localization films after placement of the applicator.
20.05 Prepare the radioactive sources for insertion into the applicator.
20.06 Document removal of radioactive the sources.
20.07 Transport the radioactive sources to the patients location.
20.08 Assist the Radiation Therapist in placement of the radioactive sources.
20.09 Take and record appropriate radiation levels in accordance with the recommendations of the NRC.
20.10 Assist in the removal of the radioactive sources.
20.11 Perform dosage calculations utilizing the radiographs done for the applicator localization.
20.12 Transport, return and document the replacement of the radioactive sources as indicated by the dosage calculation.

21.0 ASSIST THE RADIATION THERAPY PHYSICIST IN CALIBRATION PROCEDURES, DETECTION OF ERRATIC PERFORMANCE OF EQUIPMENT, AND IN THE ORGANIZATION AND MAINTENANCE OF THE RADIATION PROTECTION PROGRAM
-- The student will be able to:

21.01 Wear appropriate monitoring device while on duty to obtain a record of radiation exposure over a period of time.
21.02 Protect workers and others in the area from radiation exposure.
21.03 Perform radiation surveys as directed by the Physicist.

22.0 BE RESPONSIBLE FOR "IN VIVO" DOSIMETRY
-- The student will be able to:

22.01 Place TLD crystals as directed in the treatment field in order to verify dosage.
22.02 Read and record dose verified.
22.03 Perform other "in vivo" dosimetry as directed.

23.0 WORK WITH THE RADIATION ONCOLOGIST AND PHYSICIST WITH RESEARCH, CONTINUING EDUCATION, AND THE IMPLEMENTATION OF NEW TECHNIQUES OF RADIATION THERAPY -- The student will be able to:

23.01 Read current publications regarding new treatment techniques.
23.02 Strive to isolate new topics for publication.
23.03 Participate in research problems with the Radiation Therapist and Physicist.
23.04 Participate in continuing education activities for personnel in radiation therapy.
23.05 Participate in educational conferences in radiation therapy.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: NUCLEAR MEDICINE TECHNOLOGY
Occupational Area: Health Science

	PSV
CIP Numbers	0317020800
Program Numbers	0317020800
Grade Level	College
Length	Associate Degree/75 credit hours

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as radiologic technologists or nuclear medicine technologists (32914219), (078.361-018), or to provide supplemental training for persons previously or currently employed in these occupations.

The program must be accredited by the:

Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT)
1144 West 3300 South
Salt Lake City, Utah 84119-3330
(801) 975-1144

The program must also be approved by the Department of Health & Rehabilitative Services, Office of Radiation Control so that the graduate is eligible to be licensed in Florida as a Certified Radiologic Technologist - Nuclear Medicine. As specified in Chapter 468, Part IV and 10 D-74 FAC.

The nuclear medicine technologist performs patient care with understanding of patients' special needs, fears and concerns and recognizes changes in patient condition. Limiting the exposure of the patient and other health care workers to minimal levels of radiation is of paramount importance.

The content includes, but is not limited to, the utilization of radioactive materials for diagnostic and therapeutic procedures, patient care, administrative functions, health and safety including CPR.

A fundamental knowledge and understanding of the physical and biological sciences, including radiation biology and protection, as well as radiopharmaceuticals "in vivo" and "in vitro", is essential: nuclear physics, biochemistry, immunology, physiology and an introduction to computer application/operation with data manipulation must be included.

II. **LABORATORY ACTIVITIES**: Simulation activities are utilized extensively to prepare students for real clinical experiences which are integrated with the didactic portion of the program. Equipment used must be similar to that used in hospitals.

A clinical practicum where students work with patients under competent medical direction and close supervision by qualified technologists, NMTCB, or ARRT(N). An effective ratio of students to clinical instructors must be maintained at all times.

III. **SPECIAL NOTE**: Program completers will be eligible to make an application to take the National Registry examination. For further information contact:

American Registry of Radiologic Technologists (ARRT)
1255 Northland Drive
St. Paul, MN 55120-1155
(612/687-0048).

Students are encouraged to become members of their appropriate professional organizations such as the American Society of Radiologic Technologists (ASRT), Florida Society of Radiologic Technologists (FSRT) and it's local affiliate.

The standard credit hour length for this program is 75 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01. Demonstrate knowledge of the health care delivery system and health occupations.
02. Demonstrate the ability to communicate and use interpersonal skills effectively.
03. Demonstrate legal and ethical responsibilities.
04. Demonstrate an understanding of and apply wellness and disease concepts.
05. Recognize and practice safety and security procedures.
06. Recognize and respond to emergency situations.
07. Recognize and practice infection control procedures.
08. Demonstrate computer literacy.
09. Demonstrate employability skills.
10. Demonstrate knowledge of blood borne diseases, including AIDS.
11. Apply basic math and science skills.

NUCLEAR MEDICINE TECHNOLOGY (12-18)

12. Practice radiation safety.
13. Practice basic radiopharmacy.
14. Calculate doses and administer radiopharmaceuticals.
15. Perform "in vitro"/"in vivo" nonimaging procedures.
16. Perform imaging procedures.
17. Perform computerized procedures.
18. Practice quality control.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Nuclear Medicine Technology
POSTSECONDARY NUMBER: 0317.020800

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

03.01 Discuss the legal framework of the health care occupation.

03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyrimid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.

11.07 Organize and communicate the results obtained by observation and experimentation.

11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

11.09 Calculate ratios.

NUCLEAR MEDICINE TECHNOLOGY The intended outcomes (12-18) complete the occupational completion point of Nuclear Medicine Technology.

12.0 PRACTICE RADIATION SAFETY -- The student will be able to:

12.01 Assure compliance with local, state and federal regulations.

12.02 Follow appropriate protection procedures.

12.03 Perform area surveys and wipe tests.

12.04 Perform decontamination procedures.

12.05 Appropriately dispose of radioactive waste.

12.06 Follow approved procedures for identifying and labeling.

12.07 Practice personnel monitoring of radiation exposure.

13.0 PRACTICE BASIC RADIOPHARMACY -- The student will be able to:

13.01 Maintain radiopharmaceutical laboratory records and materials.

13.02 Obtain generator eluate.

13.03 Prepare radiopharmaceuticals and perform quality control tests.

13.04 Appropriately dispose of radioactive waste.

13.05 Demonstrate understanding of ordering pharmaceuticals in appropriate dosage and effective time frame.

14.0 CALCULATE DOSES AND ADMINISTER RADIOPHARMACEUTICAL - The student will be able to:

14.01 Assay radiopharmaceuticals.

14.02 Calculate doses.

14.03 Dispense exact doses.

14.04 Properly administer radiopharmaceuticals.

14.05 Maintain records of administrations/preparations.

14.06 Perform dose calibrator quality control tests.

15.0 PERFORM "IN VITRO"/"IN VIVO" NONIMAGING PROCEDURES - The student will be able to:

15.01 Operate conventional laboratory equipment.

15.02 Prepare doses and standards.

15.03 Collect specimens.

15.04 Operate radiation detection equipment.

15.05 Perform calculations.

15.06 Perform radioassays.

15.07 Perform venipuncture accurately and efficiently.

16.0 PERFORM IMAGING PROCEDURES -- The student will be able to:

16.01 Prepare patients.

16.02 Select imaging parameters.

16.03 Position patients and obtain images.
16.04 Perform data processing.
16.05 Maintain appropriate records.

17.0 PERFORM COMPUTERIZED PROCEDURES -- The student will be able to:

17.01 Retrieve patient studies and display on computer video screen.
17.02 Select proper protocol and process data.
17.03 Acquire and store patient studies for future reference.
17.04 Manipulate computer data for appropriate display.

18.0 PRACTICE QUALITY CONTROL -- The student will be able to:

18.01 Perform quality assurance testing of imaging systems.
18.02 Calibrate and operate scintillation counters.
18.03 Calibrate and operate gas-filled detectors.
18.04 Perform quality assurance testing of routine imaging and assay procedures.

July 1997

FLORIDA DEPARTMENT OF EDUCATION
CURRICULUM FRAMEWORK

Program Title:	NUCLEAR MEDICINE TECHNOLOGY SPECIALIST
Occupational Area:	HEALTH SCIENCE
	PSV
CIP Numbers	0317.020801
Grade Level	College
Length	Certificate

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as radiologic technologists, nuclear medicine or nuclear medicine technologists (32914215), (078.361-018), or to provide supplemental training for persons previously or currently employed in these occupations.

The program must be accredited by the:

Joint Review Committee on Educational Programs in Nuclear
Medicine Technology (JRCNMT)
1144 West 3300 South
Salt Lake City, Utah 84119-3330
(801) 975-1144

The program must also be approved by the Department of Health and Rehabilitative Services, Office of Radiation Control so that the graduate is eligible to be licensed in Florida as a Certified Radiologic Technologist - Nuclear Medicine. As specified in Chapter 468, Part IV and 10 D-74 F.A.C.

The nuclear medicine technologist performs patient care with understanding of patient's special needs, fears and concerns and recognizes changes in patient condition. Limiting the exposure of the patient and other health care workers to minimal levels of radiation is of paramount importance.

The content includes, but is not limited to, the utilization of radioactive materials for diagnostic and therapeutic procedures, patient care, administrative functions, health and safety including CPR.

A fundamental knowledge and understanding of the physical and biological sciences, including radiation biology and protection, as well as radiopharmaceuticals "in vivo" and "Invitro" is essential: nuclear physics, biochemistry, immunology, physiology and an introduction to computer applications/operations with data manipulation must be included.

II. **LABORATORY ACTIVITIES**: Simulation activities are utilized extensively to prepare students for real clinical experience which are integrated with didactic portion of the program. Equipment used must be similar to that used in hospitals.

A clinical practicum where students work with patients under competent medical direction and close supervision by qualified technologists, NMTCB, or ARRT (N). An effective ratio of students to clinical instructors must be maintained at all times.

III. **SPECIAL NOTE**: The designation of PSV-C requires that the student have an associate degree in a related field of study (i.e. radiologic technology, etc.). Upon the successful completion of the program the student will receive a Nuclear Medicine Specialist Certificate.

Program completers will be eligible to make an application to take then National Registry examination. For further information contact:

American Registry of Radiologic Technologists (ARRT)
1255 Northland Drive
St. Paul, MN 55120-1155
(612/687-0048).

Students are encouraged to become members of their appropriate professional organizations such as the American Society of Radiologic Technologists (ASRT), Florida Society of Radiologic Technologists (FSRT) and its' local affiliate.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to perform the following:

HEALTH CAREERS CORE (01-11)

01. Demonstrate knowledge of the health care delivery system and health occupations.
02. Demonstrate the ability to communicate and use interpersonal skills effectively.
03. Demonstrate legal and ethical responsibilities.
04. Demonstrate an understanding of and apply wellness and disease concepts.
05. Recognize and practice safety and security procedures.
06. Recognize and respond to emergency situations.
07. Recognize and practice infection control procedures.
08. Demonstrate computer literacy.
09. Demonstrate employability skills.
10. Demonstrate knowledge of blood borne diseases, including AIDS.
11. Apply basic math and science skills.

NUCLEAR MEDICINE TECHNOLOGY (12-18)

12. Practice radiation safety.
13. Practice basic radiopharmacy.
14. Calculate doses and administer radiopharmaceuticals.
15. Perform "in vitro"/"in vivo" nonimaging procedures.
16. Perform imaging procedures.
17. Perform computerized procedures.
18. Practice quality control.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Nuclear Medicine Technology Specialist
POSTSECONDARY NUMBER: 0317.020801

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS

-- The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES

-- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire safety and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS

-- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS skills of basic rescuer or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES

-- The student will be able to:

07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.

09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the I Individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.

11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

NUCLEAR MEDICINE TECHNOLOGY The intended outcomes (12-18) completes the occupational completion point of Nuclear Medicine Technology.

12.0 PRACTICE RADIATION SAFETY -- The student will be able to:

12.01 Assure compliance with local, state and federal regulations.
12.02 Follow appropriate protection procedures.
12.03 Perform area surveys and wipe tests.
12.04 Perform decontamination procedures.
12.05 Appropriately dispose of radioactive waste.
12.06 Follow approved procedures for identifying and labeling.
12.07 Practice personnel monitoring of radiation exposure.

13.0 PRACTICE BASIC RADIOPHARMACY -- The student will be able to:

13.01 Maintain radiopharmaceutical laboratory records and materials.
13.02 Obtain generator eluate.
13.03 Prepare radiopharmaceuticals and perform quality control tests.
13.04 Appropriately dispose of radioactive waste.
13.05 Demonstrate understanding of ordering pharmaceuticals in appropriate dosage and effective time frame.

14.0 CALCULATE DOSES AND ADMINISTER RADIOPHARMACEUTICALS - The student will be able to:

14.01 Assay radiopharmaceuticals.
14.02 Calculate doses.
14.03 Dispense exact doses.
14.04 Properly administer radiopharmaceuticals.
14.05 Maintain records of administrations/preparations.
14.06 Perform dose calibrator quality control tests.

15.0 PERFORM "IN VITRO"/"IN VIVO" NONIMAGING PROCEDURES - The student will be able to:

15.01 Operate conventional laboratory equipment.
15.02 Prepare doses and standards.
15.03 Collect specimens.
15.04 Operate radiation detection equipment.
15.05 Perform calculations.
15.06 Perform radioassays.
15.07 Perform venipuncture accurately and efficiently.

16.0 PERFORM IMAGING PROCEDURES -- The student will be able to:

16.01 Prepare patients.
16.02 Select imaging parameters.
16.03 Position patients and obtain images.
16.04 Perform data processing.
16.05 Maintain appropriate records.

17.0 PERFORM COMPUTERIZED PROCEDURES -- The student will be able to:

17.01 Retrieve patient studies and display on computer video screen.
17.02 Select proper protocol and process data.
17.03 Acquire and store patient studies for future reference.
17.04 Manipulate computer data for appropriate display.

18.0 PRACTICE QUALITY CONTROL -- The student will be able to:

18.01 Perform quality assurance testing of imaging systems.
18.02 Calibrate and operate scintillation counters.
18.03 Calibrate and operate gas-filled detectors.
18.04 Perform quality assurance testing of routine imaging and assay procedures.

July 1997

FLORIDA DEPARTMENT OF EDUCATION
CURRICULUM FRAMEWORK

Program Title:	DIAGNOSTIC MEDICAL SONOGRAPHY TECHNOLOGY
Occupational Area:	Health Science

	PSV
CIP Numbers	0317.021200
Program Numbers	0317.021200
Grade Level	College
Length	Associate Degree

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as diagnostic medical sonographers or to provide supplemental training for persons previously or currently employed in this occupation.

The program should meet the requirements of:

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
515 North State Street Suite 7530
Chicago, Illinois 60610-4377
(312) 464-4623

The content includes, but is not limited to, anatomy, physiology and pathology of the abdominal, pelvic, and urogenital structures; physics; instrumentation; equipment standards; biological effect of ultrasound; patient care; clinical medicine; applications and limitations of ultrasound; related diagnostic procedures; image evaluation; administration; first aid and cardiopulmonary resuscitation; employability skills; leadership and human relations skills; health and safety.

II. **LABORATORY ACTIVITIES**: Supervised clinical learning experiences must be included according to American Medical Association guidelines, of sufficient volume and variety to assure competence.

Written clinical affiliation agreements must be maintained with each health care facility. Health care facilities must be accredited by the Joint Commission on Accreditation of Hospitals (JCAH).

III. **SPECIAL NOTE**: Prerequisites: Students must have completed postsecondary education including biological sciences, introductory physics and mathematics before being admitted to the Diagnostic Medical Sonography program. Courses in physics, biology, algebra and geometry are strongly recommended at the high school level.

The designation of PSV-C requires that the student have an associate degree in a related field of study (ie radiologic technology, nursing-RN, etc). Upon the successful completion of the program the student will receive a certificate in Diagnostic Medical Sonography Technology.

Students completing this program may apply to take the national registry examination to obtain certification, for further information contact:

American Registry of Diagnostic
Medical Sonographers (ARDMS)
2368 Victory Parkway, Suite 510
Cincinnati, Ohio 45206,
(513)281-7111 or (1-800/541-9754)

The standard credit hour length for this program is 72 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES**: After successfully completing this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01. Demonstrate knowledge of the health care delivery system and health occupations.
02. Demonstrate the ability to communicate and use interpersonal skills effectively.
03. Demonstrate legal and ethical responsibilities.
04. Demonstrate an understanding of and apply wellness and disease concepts.
05. Recognize and practice safety and security procedures.
06. Recognize and respond to emergency situations.
07. Recognize and practice infection control procedures.
08. Demonstrate computer literacy.
09. Demonstrate employability skills.
10. Demonstrate knowledge of blood borne diseases, including AIDS.
11. Apply basic math and science skills.

DIAGNOSTIC MEDICAL SONOGRAPHY TECHNOLOGY (12-23)

12. Demonstrate an awareness of the uses of ultrasound imaging, types of presentations, orientation, and relationships to other imaging modalities.
13. Demonstrate an awareness of the basic principles of ultrasound physics, emphasizing practical relationships of physics to proper diagnosis.
14. Demonstrate an awareness of ultrasound physics by exploring the various aspects of the field through individual experimentation.
15. Apply knowledge of the anatomy and scanning techniques related to the upper abdominal organs and systems.
16. Demonstrate an awareness of the basic principles of instrumentation common to the field of ultrasound.
17. Apply knowledge gained in instrumentation lecture and work with actual ultrasound scanners similar to those found in local hospitals.
18. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
19. Apply knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.

20. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography of the genitourinary system.
21. Develop a continuous awareness of the disease process.
22. Apply accumulated knowledge to the process of creating diagnostic sonograms.
23. Apply skills needed to complete diagnostic images of high quality from a variety of scanning units.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Diagnostic Medical Sonography Technology
POSTSECONDARY NUMBER: 0317.021200

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

03.01 Discuss the legal framework of the health care occupation.

03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS

-- The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyrimid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES

-- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire safety and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS

-- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS skills of basic rescuer or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES

-- The student will be able to:

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07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.

11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

DIAGNOSTIC MEDICAL SONOGRAPHY TECHNOLOGY The intended outcomes (12-23) completes the occupational completion point of Diagnostic Medical Sonography Technology.

12.0 DEMONSTRATE AN AWARENESS OF THE USES OF ULTRASOUND IMAGING, TYPES OF PRESENTATIONS, ORIENTATION, AND RELATIONSHIPS TO OTHER IMAGING MODALITIES -- The student will be able to:

12.01 Describe the relationship of ultrasound to other imaging fields.
12.02 Explain the role of the sonographer.
12.03 Describe and explain the proper uses of orientation and standard labeling of ultrasound images.
12.04 Describe/Explain protocol for a sonogram from the time the exam is ordered to the time your patient is ready to be scanned.
12.05 Explain the basic concepts of ultrasound equipment available and demonstrate safety in their use and basic techniques of scanning.
12.06 Explain and use the criteria for film evaluation and specifically of special sonographic parameters.
12.07 Describe special problems encountered and methods to improve medical ethics in sonography.
12.08 Describe the organizational structure common to most hospitals with special emphasis placed on the role of the ultrasound department.
12.09 Describe the relationship of the sonographer to the patients and their special needs.

13.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF ULTRASOUND PHYSICS, EMPHASIZING PRACTICAL RELATIONSHIPS OF PHYSICS TO PROPER DIAGNOSIS -- The student will be able to:

13.01 Explain what sound is and its characteristics.
13.02 Compare the difference between pulsed and continuous wave sound.
13.03 Explain amplitude and intensity of sound as it applies to the field of ultrasound.
13.04 Describe the causes and effects of attenuation and impedance on ultrasound.
13.05 Identify the causes and effects of incidence, scattering and refraction of ultrasound.
13.06 Explain the Doppler effect and its use in medicine.
13.07 Describe the factors of attenuation versus depth penetration of ultrasound in human tissue.
13.08 Identify resolution and controlling factors of resolution as applied to the field of ultrasound.

14.0 DEMONSTRATE AN AWARENESS OF ULTRASOUND PHYSICS BY EXPLORING THE VARIOUS ASPECTS OF THE FIELD THROUGH INDIVIDUAL EXPERIMENTATION -- The student will be able to:

14.01 Discuss and demonstrate the basic principles governing sound and sound interaction in various types of tissue.
14.02 Describe and demonstrate the conditions affecting sound transmission such as the attenuation factors.
14.03 Relate mathematical formulas to the action of sound at interfaces of various qualities.
14.04 Describe resolution and its effect on the final image.
14.05 Describe and demonstrate the factors that control and determine both axial and lateral resolution.

15.0 APPLY KNOWLEDGE OF THE ANATOMY AND SCANNING TECHNIQUES RELATED TO THE UPPER ABDOMINAL ORGANS AND SYSTEMS -- The student will be able to:

15.01 Draw and label the gross upper abdominal organs in both longitudinal and transverse dimensions.
15.02 Identify the gross upper abdominal anatomy as demonstrated by sonography, and common anatomic drawings.
15.03 Explain the physiology of the upper abdominal organs and the related lab examinations.
15.04 Explain the normal preparations for the sonographic demonstration of the upper abdominal organs.
15.05 Explain the protocol for (actual) scanning sonographically the upper abdominal organs.
15.06 Explain the common pathology related to the upper abdomen and correlate with special scanning techniques.
15.07 Demonstrate the normal anatomy of the upper abdomen with a real-time device.
15.08 Explain the various types of equipment and their selection in performing an ultrasound exam.
15.09 Explain and use the various techniques of instrumentation required to create a diagnostic sonogram.
15.10 Explain and use the methods of patient preparation and care before and during a sonogram.
15.11 Present a sonographic exam in completed form.
15.12 Perform a complete ultrasound examination of the upper abdomen with little if any assistance (from patient preparation to final reading).
15.13 Demonstrate skills to develop and maintain the special relationship of the sonographer to the patient and to other persons in medicine.
15.14 Demonstrate laboratory safety techniques as related to sonographic imaging units in the patient examination situation.
15.15 Use basic techniques for orientation and labeling of sonographic images.
15.16 Describe the preparations and over-all procedures for a typical ultrasound examination of the upper abdomen.
15.17 Identify gross abdominal structures as demonstrated by ultrasound such as the liver, gall bladder, aorta, inferior vena cava, stomach, pancreas, bowel and spleen.

16.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF INSTRUMENTATION COMMON TO THE FIELD OF ULTRASOUND -- The student will be able to:

16.01 Describe piezoelectric effects.
16.02 Describe both static and real-time transducer construction.
16.03 Discuss historical perspective of scanner development.
16.04 Explain and describe signal processing how it effects image presentations.
16.05 Discuss basic unit construction in the form of block diagrams static, real-time and Doppler.
16.06 Describe the purpose and use of typical controls located on static, real-time and Doppler ultrasound scanners.
16.07 Identify methods of determining and assuring quality control both sonographically and photographically.
16.08 Demonstrate communication skills required on a daily basis in the typical sonography setting.
16.09 Discuss causes, detection and control of factors that may create biologic effects in human tissue with insonation at the diagnostic medical exposure level.

17.0 APPLY KNOWLEDGE GAINED IN INSTRUMENTATION LECTURE AND WORK WITH ACTUAL ULTRASOUND SCANNERS SIMILAR TO THOSE FOUND IN LOCAL HOSPITALS
-- The student will be able to:

17.01 Develop and use patient information systems and impressions.
17.02 Explain the various types of transducers available on the market, their construction and selection for sonographic imaging.
17.03 Explain and use amplification in all its forms to produce a diagnostic quality sonogram.
17.04 Explain and use power to produce a diagnostic quality sonogram.
17.05 Explain and use the various forms of processing to produce a diagnostic quality sonogram.
17.06 Explain and use the various types of scanning movements required to produce diagnostic quality sonograms.
17.07 To explain and recognize typical artifacts as found in sonographic imaging and photography.
17.08 Explain and use a test object.

18.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTETRICS
-- The student will be able to:

18.01 Describe the basic stages of embryology and sonographic relationships.
18.02 Describe events occurring in the first trimester and their relationship to ultrasound.
18.03 Discuss anatomy, physiology and pathology of the various stages of fetal development as related to ultrasound.
18.04 Discuss anatomy, physiology and pathology of the placenta at all stages of development.
18.05 Describe methods for determining gestational and fetal growth by ultrasound and physical examination methods.
18.06 Identify specific diseases common to the gestational period.
18.07 Describe normal anatomy of the female pelvis and its relationship to ultrasound.
18.08 Compare normal and abnormal states of embryology in the human as demonstrated by ultrasound.

18.09 Explain the normal anatomy of the pregnant uterus and dating techniques of the fetus and placenta.
18.10 Compare the normal and pathologic appearance of the fetus.
18.11 Demonstrate special techniques of ultrasound scanning and collateral processes during pregnancy.

19.0 APPLY KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY OF THE PELVIS -- The student will be able to:

19.01 Explain sonographic evaluation of the female pelvis in the pathologic state.
19.02 Discuss anatomy, physiology and pathology of the female reproductive organs.
19.03 Describe the normal anatomy and scanning techniques used to demonstrate the female and male pelvis.
19.04 Describe pathology common to the human pelvis and special techniques for demonstrating sonographically.
19.05 Explain the process used to develop pelvic mass charts and their use.

20.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY OF THE GENITOURINARY SYSTEM -- The student will be able to:

20.01 Identify anatomy of renals.
20.02 Describe physiology of renals.
20.03 Discuss pathology of renals.
20.04 Explain scanning techniques of renals.
20.05 Discuss anatomy, physiology, pathology and scanning techniques of adrenals.
20.06 Discuss gross anatomy, pathology and scanning techniques of the ureters, urinary bladder, prostate, testicles.
20.07 Compare the normal and pathologic anatomy of the human renal system to include adrenals.
20.08 Describe the scanning techniques common to sonographic imaging of the renals and the adrenals.

21.0 DEVELOP A CONTINUOUS AWARENESS OF THE DISEASE PROCESSES -- The student will be able to:

21.01 Discuss basic concepts of the causes of disease.
21.02 Discuss common urogenital pathology.
21.03 Discuss gastrointestinal diseases.
21.04 Discuss common pathology found in obstetrics and gynocology.
21.05 Discuss common pathology found in the cardiovascular system.
21.06 Discuss common pathology found in the eye and orbit.

22.0 APPLY ACCUMULATED KNOWLEDGE TO THE PROCESS OF CREATING DIAGNOSTIC SONOGRAMS -- The student will be able to:

22.01 Complete in all aspects a diagnostic sonogram with emphasis on:
    patient identification
    patient interaction
    general attitude

creation of sonogram
safety
recognition of anatomy, both normal and pathologic.

22.02 Complete routine documentation associated with a typical ultrasound department.

23.0 APPLY SKILLS NEEDED TO COMPLETE DIAGNOSTIC IMAGES OF HIGH QUALITY FROM A VARIETY OF SCANNING UNITS -- The student will be able to:

23.01 Perform complete and diagnostic examinations of the abdomen, pelvis and obstetrical patient using real-time and/or static devices.
23.02 Present completed examinations in detail with justification of all techniques, methods and procedures used to obtain data.
23.03 Identify gross pathology of the abdomen, pelvis and obstetrical patient, both on sonograms and related imaging modalities.
23.04 Perform all preliminary procedures leading to actual examination by sonography and all procedures necessary post examination.
23.05 Demonstrate skills needed to relate with tact and diplomacy with patients, physicians, nurses, other imaging personnel and the general hospital population.
23.06 Demonstrate those characteristics that reflect the high degree of professionalism associated with the field of ultrasound.

July 1997

FLORIDA DEPARTMENT OF EDUCATION
CURRICULUM FRAMEWORK

Program Title: DIAGNOSTIC MEDICAL SONOGRAPHY SPECIALIST
Occupational Area: Health Science

	PSV-C
CIP Numbers	0317.021201
Program Numbers	0317.021201
Grade Level	College
Length	Certificate

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as diagnostic medical sonographers or to provide supplemental training for persons previously or currently employed in this occupation.

The program should meet the requirements of:

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
515 North State Street Suite 7530
Chicago, Illinois 60610-4377
(312) 464-4623

The content includes, but is not limited to, anatomy, physiology and pathology of the abdominal, pelvic, and urogenital structures; physics; instrumentation; equipment standards; biological effect of ultrasound; patient care; clinical medicine; applications and limitations of ultrasound; related diagnostic procedures; image evaluation; administration; first aid and cardiopulmonary resuscitation; employability skills; leadership and human relations skills; health and safety.

II. **LABORATORY ACTIVITIES**: Supervised clinical learning experiences must be included according to American Medical Association guidelines, of sufficient volume and variety to assure competence.

Written clinical affiliation agreements must be maintained with each health care facility. Health care facilities must be accredited by the Joint Commission on Accreditation of Hospitals (JCAH).

III. **SPECIAL NOTE: Prerequisites**: Students must have completed postsecondary education including biological sciences, introductory physics and mathematics before being admitted to the Diagnostic Medical Sonography program. Courses in physics, biology, algebra and geometry are strongly recommended at the high school level.

The designation of PSV-C requires that the student have an associate degree in a related field of study (ie radiologic technology, nursing-RN, etc). Upon the successful completion of the program the student will receive a Diagnostic Medical Sonography Specialist Certificate.

Students completing this program may apply to take the national registry examination to obtain certification, for further information contact:

American Registry of Diagnostic
Medical Sonographers (ARDMS)

2368 Victory Parkway, Suite 510
Cincinnati, Ohio 45206,
(513)281-7111 or (1-800/541-9754)

The recommended length of this program is 1680 hours.

IV. INTENDED OUTCOMES: After successfully completing this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01. Demonstrate knowledge of the health care delivery system and health occupations.
02. Demonstrate the ability to communicate and use interpersonal skills effectively.
03. Demonstrate legal and ethical responsibilities.
04. Demonstrate an understanding of and apply wellness and disease concepts.
05. Recognize and practice safety and security procedures.
06. Recognize and respond to emergency situations.
07. Recognize and practice infection control procedures.
08. Demonstrate computer literacy.
09. Demonstrate employability skills.
10. Demonstrate knowledge of blood borne diseases, including AIDS.
11. Apply basic math and science skills.

DIAGNOSTIC MEDICAL SONOGRAPHY SPECIALIST (12-23)

12. Demonstrate an awareness of the uses of ultrasound imaging, types of presentations, orientation, and relationships to other imaging modalities.
13. Demonstrate an awareness of the basic principles of ultrasound physics, emphasizing practical relationships of physics to proper diagnosis.
14. Demonstrate an awareness of ultrasound physics by exploring the various aspects of the field through individual experimentation.
15. Apply knowledge of the anatomy and scanning techniques related to the upper abdominal organs and systems.
16. Demonstrate an awareness of the basic principles of instrumentation common to the field of ultrasound.
17. Apply knowledge gained in instrumentation lecture and work with actual ultrasound scanners similar to those found in local hospitals.
18. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
19. Apply knowledge of anatomy, pathology, and scanning techniques used in modern sonography for obstetrics and gynecology.
20. Demonstrate awareness of knowledge of anatomy, pathology, and scanning techniques used in modern sonography of the genitourinary system.
21. Develop a continuous awareness of the disease process.
22. Apply accumulated knowledge to the process of creating diagnostic sonograms.
23. Apply skills needed to complete diagnostic images of high quality from a variety of scanning units.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Diagnostic Medical Sonography Specialist
POSTSECONDARY NUMBER: 0317.021201

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS -- The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY -- The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES -- The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.

03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS -- The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyrimid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES -- The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire safety and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS -- The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS skills of basic rescuer or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES -- The student will be able to:

07.01 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation.
07.02 Demonstrate knowledge of surgical asepsis as utilized in sterilization.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY -- The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS -- The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS -- The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS -- The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

DIAGNOSTIC MEDICAL SONOGRAPHY SPECIALIST The intended outcomes (12-23) completes the occupational completion point of Diagnostic Medical Sonography Specialist.

12.0 DEMONSTRATE AN AWARENESS OF THE USES OF ULTRASOUND IMAGING, TYPES OF PRESENTATIONS, ORIENTATION, AND RELATIONSHIPS TO OTHER IMAGING MODALITIES -- The student will be able to:

12.01 Describe the relationship of ultrasound to other imaging fields.
12.02 Explain the role of the sonographer.
12.03 Describe and explain the proper uses of orientation and standard labeling of ultrasound images.
12.04 Describe/Explain protocol for a sonogram from the time the exam is ordered to the time your patient is ready to be scanned.
12.05 Explain the basic concepts of ultrasound equipment available and demonstrate safety in their use and basic techniques of scanning.
12.06 Explain and use the criteria for film evaluation and specifically of special sonographic parameters.
12.07 Describe special problems encountered and methods to improve medical ethics in sonography.
12.08 Describe the organizational structure common to most hospitals with special emphasis placed on the role of the ultrasound department.
12.09 Describe the relationship of the sonographer to the patients and their special needs.

13.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF ULTRASOUND PHYSICS, EMPHASIZING PRACTICAL RELATIONSHIPS OF PHYSICS TO PROPER DIAGNOSIS -- The student will be able to:

13.01 Explain what sound is and its characteristics.
13.02 Compare the difference between pulsed and continuous wave sound.
13.03 Explain amplitude and intensity of sound as it applies to the field of ultrasound.
13.04 Describe the causes and effects of attenuation and impedance on ultrasound.
13.05 Identify the causes and effects of incidence, scattering and refraction of ultrasound.
13.06 Explain the Doppler effect and its use in medicine.
13.07 Describe the factors of attenuation versus depth penetration of ultrasound in human tissue.
13.08 Identify resolution and controlling factors of resolution as applied to the field of ultrasound.

14.0 DEMONSTRATE AN AWARENESS OF ULTRASOUND PHYSICS BY EXPLORING THE VARIOUS ASPECTS OF THE FIELD THROUGH INDIVIDUAL EXPERIMENTATION -- The student will be able to:

14.01 Discuss and demonstrate the basic principles governing sound and sound interaction in various types of tissue.
14.02 Describe and demonstrate the conditions affecting sound transmission such as the attenuation factors.
14.03 Relate mathematical formulas to the action of sound at interfaces of various qualities.
14.04 Describe resolution and its effect on the final image.
14.05 Describe and demonstrate the factors that control and determine both axial and lateral resolution.

15.0 APPLY KNOWLEDGE OF THE ANATOMY AND SCANNING TECHNIQUES RELATED TO THE UPPER ABDOMINAL ORGANS AND SYSTEMS -- The student will be able to:

15.01 Draw and label the gross upper abdominal organs in both longitudinal and transverse dimensions.
15.02 Identify the gross upper abdominal anatomy as demonstrated by sonography, and common anatomic drawings.
15.03 Explain the physiology of the upper abdominal organs and the related lab examinations.
15.04 Explain the normal preparations for the sonographic demonstration of the upper abdominal organs.
15.05 Explain the protocol for (actual) scanning sonographically the upper abdominal organs.
15.06 Explain the common pathology related to the upper abdomen and correlate with special scanning techniques.
15.07 Demonstrate the normal anatomy of the upper abdomen with a real-time device.
15.08 Explain the various types of equipment and their selection in performing an ultrasound exam.
15.09 Explain and use the various techniques of instrumentation required to create a diagnostic sonogram.
15.10 Explain and use the methods of patient preparation and care before and during a sonogram.
15.11 Present a sonographic exam in completed form.
15.12 Perform a complete ultrasound examination of the upper abdomen with little if any assistance (from patient preparation to final reading).
15.13 Demonstrate skills to develop and maintain the special relationship of the sonographer to the patient and to other persons in medicine.
15.14 Demonstrate laboratory safety techniques as related to sonographic imaging units in the patient examination situation.
15.15 Use basic techniques for orientation and labeling of sonographic images.
15.16 Describe the preparations and over-all procedures for a typical ultrasound examination of the upper abdomen.
15.17 Identify gross abdominal structures as demonstrated by ultrasound such as the liver, gall bladder, aorta, inferior vena cava, stomach, pancreas, bowel and spleen.

16.0 DEMONSTRATE AN AWARENESS OF THE BASIC PRINCIPLES OF INSTRUMENTATION COMMON TO THE FIELD OF ULTRASOUND -- The student will be able to:

16.01 Describe piezoelectric effects.
16.02 Describe both static and real-time transducer construction.
16.03 Discuss historical perspective of scanner development.
16.04 Explain and describe signal processing how it effects image presentations.
16.05 Discuss basic unit construction in the form of block diagrams static, real-time and Doppler.
16.06 Describe the purpose and use of typical controls located on static, real-time and Doppler ultrasound scanners.
16.07 Identify methods of determining and assuring quality control both sonographically and photographically.
16.08 Demonstrate communication skills required on a daily basis in the typical sonography setting.
16.09 Discuss causes, detection and control of factors that may create biologic effects in human tissue with insonation at the diagnostic medical exposure level.

17.0 APPLY KNOWLEDGE GAINED IN INSTRUMENTATION LECTURE AND WORK WITH ACTUAL ULTRASOUND SCANNERS SIMILAR TO THOSE FOUND IN LOCAL HOSPITALS

-- The student will be able to:

17.01 Develop and use patient information systems and impressions.
17.02 Explain the various types of transducers available on the market, their construction and selection for sonographic imaging.
17.03 Explain and use amplification in all its forms to produce a diagnostic quality sonogram.
17.04 Explain and use power to produce a diagnostic quality sonogram.
17.05 Explain and use the various forms of processing to produce a diagnostic quality sonogram.
17.06 Explain and use the various types of scanning movements required to produce diagnostic quality sonograms.
17.07 To explain and recognize typical artifacts as found in sonographic imaging and photography.
17.08 Explain and use a test object.

18.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY FOR OBSTETRICS

-- The student will be able to:

18.01 Describe the basic stages of embryology and sonographic relationships.
18.02 Describe events occurring in the first trimester and their relationship to ultrasound.
18.03 Discuss anatomy, physiology and pathology of the various stages of fetal development as related to ultrasound.
18.04 Discuss anatomy, physiology and pathology of the placenta at all stages of development.
18.05 Describe methods for determining gestational and fetal growth by ultrasound and physical examination methods.
18.06 Identify specific diseases common to the gestational period.
18.07 Describe normal anatomy of the female pelvis and its relationship to ultrasound.
18.08 Compare normal and abnormal states of embryology in the human as demonstrated by ultrasound.
18.09 Explain the normal anatomy of the pregnant uterus and dating techniques of the fetus and placenta.
18.10 Compare the normal and pathologic appearance of the fetus.
18.11 Demonstrate special techniques of ultrasound scanning and collateral processes during pregnancy.

19.0 APPLY KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY OF THE PELVIS

-- The student will be able to:

19.01 Explain sonographic evaluation of the female pelvis in the pathologic state.
19.02 Discuss anatomy, physiology and pathology of the female reproductive organs.
19.03 Describe the normal anatomy and scanning techniques used to demonstrate the female and male pelvis.
19.04 Describe pathology common to the human pelvis and special techniques for demonstrating sonographically.
19.05 Explain the process used to develop pelvic mass charts and their use.

20.0 DEMONSTRATE AWARENESS OF KNOWLEDGE OF ANATOMY, PATHOLOGY, AND SCANNING TECHNIQUES USED IN MODERN SONOGRAPHY OF THE GENITOURINARY SYSTEM -- The student will be able to:

20.01 Identify anatomy of renals.
20.02 Describe physiology of renals.
20.03 Discuss pathology of renals.
20.04 Explain scanning techniques of renals.
20.05 Discuss anatomy, physiology, pathology and scanning techniques of adrenals.
20.06 Discuss gross anatomy, pathology and scanning techniques of the ureters, urinary bladder, prostate, testicles.
20.07 Compare the normal and pathologic anatomy of the human renal system to include adrenals.
20.08 Describe the scanning techniques common to sonographic imaging of the renals and the adrenals.

21.0 DEVELOP A CONTINUOUS AWARENESS OF THE DISEASE PROCESSES -- The student will be able to:

21.01 Discuss basic concepts of the causes of disease.
21.02 Discuss common urogenital pathology.
21.03 Discuss gastrointestinal diseases.
21.04 Discuss common pathology found in obstetrics and gynocology.
21.05 Discuss common pathology found in the cardiovascular system.
21.06 Discuss common pathology found in the eye and orbit.

22.0 APPLY ACCUMULATED KNOWLEDGE TO THE PROCESS OF CREATING DIAGNOSTIC SONOGRAMS -- The student will be able to:

22.01 Complete in all aspects a diagnostic sonogram with emphasis on:
    patient identification
    patient interaction
    general attitude
    creation of sonogram
    safety
    recognition of anatomy, both normal and pathologic.
22.02 Complete routine documentation associated with a typical ultrasound department.

23.0 APPLY SKILLS NEEDED TO COMPLETE DIAGNOSTIC IMAGES OF HIGH QUALITY FROM A VARIETY OF SCANNING UNITS -- The student will be able to:

23.01 Perform complete and diagnostic examinations of the abdomen, pelvis and obstetrical patient using real-time and/or static devices.
23.02 Present completed examinations in detail with justification of all techniques, methods and procedures used to obtain data.
23.03 Identify gross pathology of the abdomen, pelvis and obstetrical patient, both on sonograms and related imaging modalities.
23.04 Perform all preliminary procedures leading to actual examination by sonography and all procedures necessary post examination.
23.05 Demonstrate skills needed to relate with tact and diplomacy with patients, physicians, nurses, other imaging personnel and the general hospital population.
23.06 Demonstrate those characteristics that reflect the high degree of professionalism associated with the field of ultrasound.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Massage Therapy
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H120405**
CIP Number	0312.040500
Grade Level	30, 31
Length	500 hours
Certification	MASSAGE TH G MASSEUR @7 @G

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as massage therapists, all other service workers (masseurs/masseusses) (69999506), or to provide supplemental training for persons previously or currently employed in this occupation. The program must be approved by the Florida Department of Business and Professional Regulations (DBPR), Board of Massage so that the graduates may take the state examination to practice as massage therapists.

The content includes, but is not limited to, the theory and practice of massage, theory and practice of hydrotherapy, hygiene, practice demonstration, human anatomy and physiology, legal aspects of massage practice, allied modalities, leadership and human relations skills, health and safety, CPR, and employability skills. Colonic irrigation is optional.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

II. **LABORATORY ACTIVITIES**: The student will develop skills in manipulation of superficial tissues of the human body through instruction by demonstration. Student practices include massage techniques, and use of hydrotherapy equipment such as steam room, sauna, treatment tables, local and full immersion baths, whirlpool baths, cabinet baths, hot and cold packs, and paraffin baths. Students will develop instructional skills in the use of adjunct and therapeutic exercise modalities.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills.

Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Colonic irrigation instruction is optional. When included, the students will be able to demonstrate knowledge of the theory of colonic irrigation and use the colonic machine in the administration of a colonic irrigation.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

After completion of this program students will be eligible to make an application to take the Florida DBPR Board of Massage licensure examination.

Contact: DBPR
Board of Massage
1940 North Monroe Street
Tallahassee, FL 32399 904/488-6021

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 10.0, and Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

Transfer credit will only be allowed based on the following standards: (BOM Ch 61G11-32.004)
(a) The school shall be provided with a certified transcript from a school licensed or approved according to Rule 61G11-32.003, F.A.C.
(b) Courses for which credit is granted shall parallel in content and intensity the courses presently offered by the school.
(c) Documentation of previous training shall be included in each student's permanent file.
(d) Regardless of previous training or transfer credit awarded, a transfer student shall be required to complete a minimum of 100

classroom hours at the rate of 6 classroom hours per day and no more than 30 classroom hours per calendar week.

The minimum length of this program is 500 hours in accordance with Board approval, to be completed at the rate of no more than 6 hours per day and no more then 30 hours per calendar week. A "classroom hour" shall be defined as no less than 50 minutes of any one clock hour, during which the student participates in a learning activity in the physical presence of a member of the faculty of the school. Programs shall be in accordance with (BOM Ch. 61G11-32.001):

COURSE OF STUDY CLASSROOM HOURS

Anatomy & Physiology 150
Basic Massage Theory & Clinical Practicum 225
Statutes/Rules and History of Massage 10
Theory & Practice of Hydrotherapy 15
Allied Modalities 97
AIDS/HIV Education 3

Equipment List: A generic equipment list is available for this program and is printed in a supplement to this document.

IV. **INTENDED OUTCOMES**: After successfully completing the core curriculum of this program, the student will be able to:

01.0 Exhibit an understanding of the principles of the theories of therapeutic massage and demonstrate the proper techniques of massage manipulations.
02.0 Exhibit an understanding of the principles of the theory of hydrotherapy and use hydrotherapy modalities.
03.0 Demonstrate safety and health practices that are conducive to the hygiene of massage therapist and the client/patient.
04.0 Demonstrate knowledge of the Florida Massage Practice Act and the rules of the Board of Massage (Chapter 480, F.S., Chapter 61-G11).
05.0 Explain the use of allied modalities related to massage.
06.0 Demonstrate an understanding of human anatomy and physiology as related to the practice of massage.
07.0 Explain and demonstrate leadership and human relations skills and ethical practices of massage.
08.0 Demonstrate employability skills.
09.0 Demonstrate a knowledge of basic business practices and standards.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Massage Therapy
Postsecondary Number: H120405

01.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF THE THEORIES OF THERAPEUTIC MASSAGE AND DEMONSTRATE THE PROPER TECHNIQUES OF MASSAGE MANIPULATIONS--The student will be able to:

01.01 Discuss the history of massage and historical practitioners.
01.02 Explain the physiological effects of massage.
01.03 Perform the various manipulations.
01.04 Discuss the effects and usage of lubricants used in massage and apply lubricants.
01.05 Understand the indications and contraindications of massage therapy.
01.06 Interview the client/patient to ascertain his/her indications and/or contraindications for therapy.
01.07 Operate specific massage equipment - vibrators.
01.08 Practice proper body mechanics.
01.09 Perform proper client/patient draping techniques.

02.0 EXHIBIT AN UNDERSTANDING OF THE PRINCIPLES OF THE THEORY OF HYDROTHERAPY AND USE HYDROTHERAPY MODALITIES--The student will be able to:

02.01 Discuss the history of hydro-therapy and historical practitioners.
02.02 Interview the clients/patients to ascertain their indications and/or contraindications for therapy.
02.03 Perform hydrotherapy services such as hydro-kinetics, hydro-thermal and hydro-static.
02.04 Demonstrate knowledge of accepted temperature and time standards for each hyydrotherapy technique.

03.0 DEMONSTRATE SAFETY AND HEALTH PRACTICES THAT ARE CONDUCIVE TO THE HYGIENE OF MASSAGE THERAPIST AND THE CLIENT/PATIENT--The student will be able to:

03.01 Explain the ways a facility should be planned and maintained to promote health and safety.
03.03 Demonstrate proper client/patient positioning, support, draping and turning techniques.
03.04 Outline practices conducive to personal health, appearance and cleanliness.

04.0 DEMONSTRATE KNOWLEDGE OF THE STATUTES AND RULES OF FLORIDA MASSAGE PRACTICE ACT AND THE RULES OF THE FL BOARD OF MASSAGE (Chapter 480, F.S.; Chapter 61G11)--The student will be able to:

04.01 State the purpose of the Massage Practice Act.
04.02 State the qualifications necessary for licensure and renewal of license.

04.03 State the function of the Board of Massage and the Department of Business and Professional Regulations.
04.04 State the conditions necessary for acceptance for examination by the Board.
04.05 State the requirements for massage establishments and their inspection.
04.06 Understand the grounds for which disciplinary actions may be taken by the Board of Massage.
04.07 Define the terms: Board, Department, Massage Therapist, Apprentice, Provisional, Inactive Licensure, Establishment and Licensure.

05.0 EXPLAIN THE USE OF ALLIED MODALITIES RELATED TO MASSAGE--The student will be able to:

05.01 Identify various modalities utilized within the scope of practice of massage.
05.02 Identify related modalities outside the scope of massage for the purposes of referral.
05.03 Instruct clients/patients in the use of various allied modalities.

06.0 DEMONSTRATE AN UNDERSTANDING OF HUMAN ANATOMY AND PHYSIOLOGY AS RELATED TO THE PRACTICE OF MASSAGE--The student will be able to:

06.01 Explain the structure and function of all the body systems, organs, tissues and cells with emphasis on origins, insertions and actions of muscles.
06.02 Explain the concept of homeostasis and how it relates to massage therapy and its modalities.
06.03 Explain the effects on the human body of massage, hydrotherapy, and various modalities.
06.04 Demonstrate knowledge and use of appropriate medical terminology in the field of massage therapy.

07.0 EXPLAIN AND DEMONSTRATE LEADERSHIP AND HUMAN RELATIONS SKILLS AND ETHICAL PRACTICES OF MASSAGE--The student will be able to:

07.01 Demonstrate professional behaviour through various methods of communication.
07.02 Explain behavior which develops leadership qualities.
07.03 Demonstrate knowledge of professional standards and ethical guidelines pertaining to massage therapy.

08.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

08.01 Conduct a job search.
08.02 Secure information about a job.
08.03 Identify documents that may be required when applying for a job.
08.04 Complete a job application.
08.05 Demonstrate competence in job interview techniques.
08.06 Identify or demonstrate appropriate responses to cri-ticism from employer, supervisor, or other persons.

08.07 Identify acceptable work habits.
08.08 Demonstrate knowledge of how to make job changes appropriately.
08.09 Demonstrate acceptable employee health habits.

09.0 DEMONSTRATE KNOWLEDGE OF BASIC BUSINESS PRACTICES AND STANDARDS--The student will be able to:

09.01 Define basic business practices and standards.
09.02 List the advantages and disadvantages of business ownership.
09.03 Identify the necessary personal characteristics of a successful entrepreneur.
09.04 Identify the business skills needed to operate a small business efficiently and effectively.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens.
10.02 Identify community resources and services available to individuals with diseases caused by blood borne pathogens.
10.03 Identify at risk behaviors which promote the spread of AIDS and the public education necessary to combat the spread of diseases caused by blood borne pathogens.
10.04 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Center for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

July 1997

Florida Department of Education
CLUSTER CURRICULUM FRAMEWORK

Program Title:	Medical Assisting
Program Type:	Job Preparatory
Occupational Area:	Health Science Education
Components:	Core, One Program, One Occupational Completion Point, and Multiple Entry Points
	PSAV
Program Number	**H170503**
CIP Number	0317.050300
Grade Level	30, 31
Length	1300 hours
Certification	NURSING ED @5 MED ASST @7 G PRAC NURSE @7 @G TEC MED !7 !G LAB TECH @7 G REG NURSE G
Facility Code:	253
VSO:	HOSA
Coop Method:	No
Apprenticeship:	No
Basic Skills	
Math	10
Language	10
Reading	10

I. **PURPOSE:** This program is designed to prepare students for employment as medical assistants (66005443) or to provide supplemental training for persons previously or currently employed in this occupation. The program should meet the standards of the Essentials and Guidelines of an Accredited Educational Program for the Medical Assistant adopted by the American Association of Medical Assistants and the Commission on Accreditation of Allied Health Education Programs (CAAHEP) 1994. For further information contact: (312) 464-4623

CAAHEP
515 North State Street, Suite 7530
Chicago, Illinois 60610-4377

THIS PROGRAM WILL ALSO BE IN ACCORDANCE WITH FLORIDA STATUTE MEDICAL ASSISTANTS, 458.3485 F.S.

The content includes, but is not limited to, communication and interpersonal skills, legal and ethical responsibilities, health-illness concepts, administrative and clinical duties, emergency procedures including CPR and first aid, safety and security procedures, medical terminology, anatomy and physiology, and employability skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

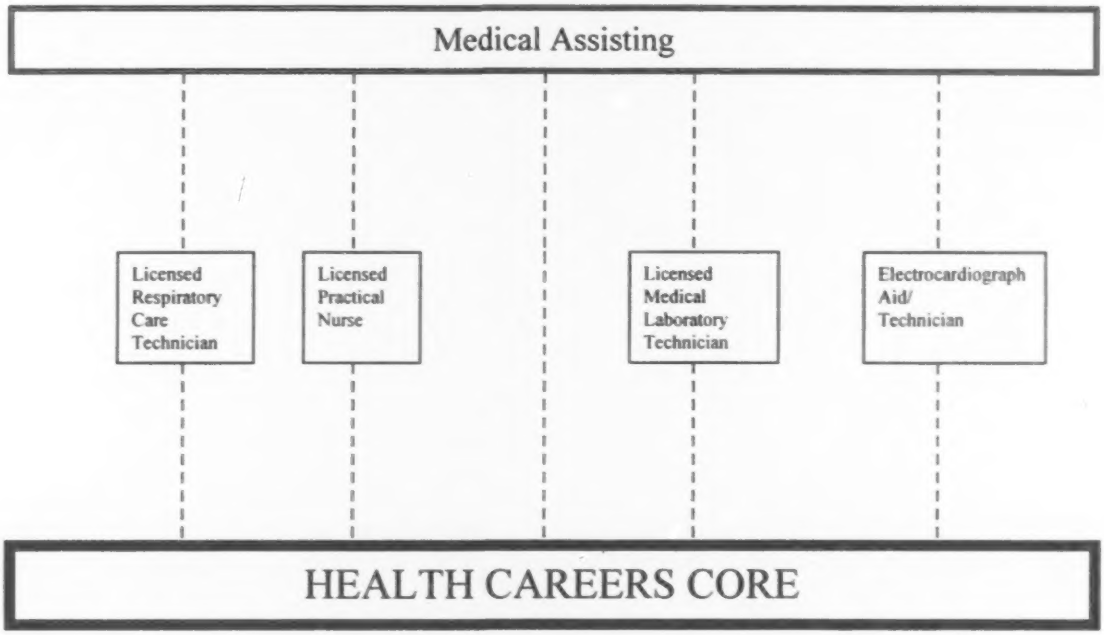
II. **PROGRAM STRUCTURE**: This cluster is a planned sequence of instruction consisting of a core, one program and one occupational completion point. When the recommended sequence is followed, the structure will allow students to complete specified portions of the program for employment or remain for advanced training.

Seven modules are included as part of this program to allow for multiple entry points based on prior training of new students. Students with no prior training must complete all seven modules. The seven modules are:

Health Careers Core
Emergency Equipment And Procedures
Pharmacology And Clinical Procedures
Medical Office Laboratory Techniques
Clinical Laboratory Procedures
Basic Electrographic Instrumentation
Medical Assisting

Students must complete the core, or demonstrate the mastery of skills standards contained in the core, before advancing in the program:

THE FOLLOWING DIAGRAM ILLUSTRATES THE CLUSTER STRUCTURE


Medical Assisting
Licensed Respiratory Care Technician
Licensed Practical Nurse
Licensed Medical Laboratory Technician
Electrocardiograph Aid/ Technician
HEALTH CAREERS CORE

III. **LABORATORY ACTIVITIES**: Clinical/laboratory experiences are integrated with the diadactic portion of the program. The medical assistant laboratory should provide students practice in the following skills: telephone, receptionist duties, bookkeeping, processing insurance forms, filing, typing and transcribing, venipuncture, basic laboratory procedures, basic X-ray procedures, use of the microscope, EKG, and physical therapy treatment procedures.

IV. **SPECIAL NOTE**: The programs in this cluster meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Health Occupations Students of America, (HOSA) Inc., is the appropriate vocational student organization as well as participation in a career related professional organization for providing leadership training experiences and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum [6A-6.064(7),F.S.].

In accordance with Rule 6A-10.040, FAC, the minimum basic skills grade level required for postsecondary adult vocational students to exit the programs in this cluster are listed at the program level or at the occupational completion points within the program. These grade level numbers correspond to a grade equivalent score obtained on one of the state designated basic skills examinations. If a student does meet the basic skills level required for completion from the program, remediation should be provided concurrently in the System for Applied Individualized Learning (SAIL) lab prior to admission in an Adult Basic Education (ABE) setting.

Program completers of an accredited program are eligible to take the American Association of Medical Assistants Certification Examination. For further information contact: American Association of Medical Assistants, 20 North Wacker Drive, Suite 1575, Chicago, Illinois 60606 (312/899-1500). If the program is not accredited, graduates are eligible to take the national examination after one year of employment.

The Medical Assistant graduate may be prepared to take the Basic X-Ray Machine Operator State exam. Contact Office of Radiation Control; DHRS; 1317 Winewood Boulevard; Tallahassee, Florida 32399; 904/487-3451.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this cluster and is printed in a supplement to this document.

V. **INTENDED OUTCOMES:** The following guidelines are recommended for licensed respiratory care technicians, licensed practical nurses, or licensed medical laboratory technicians (certificate) seeking cross-training as a medical assistant:

* Licenced Respiratory Care Technicians seeking cross-training as a medical assistant need to complete the following MODULES:
    - Pharmacology And Clinical Procedures
    - Medical Office Laboratory Techniques
    - Clinical Laboratory Procedures
    - Basic Electrographic Instrumentation
    - Medical Assisting

* Licensed Practical Nurses seeking cross-training as a medical assistant need to complete the following MODULES:
    - Clinical Laboratory Procedures
    - Basic Electrographic Instrumentation
    - Medical Assisting

* Licensed Medical Laboratory Technicians seeking cross-training as a medical assistant need to complete the following MODULES:
    - Pharmacology And Clinical Procedures
    - Basic Electrographic Instrumentation
    - Medical Assisting

* EKG Technicians or EKG Aides that have completed the secondary course EKG Aide or the postsecondary program EKG Technician need to complete the following MODULES:
    - Health Careers Core (Ekg Aides Only)
    - Emergency Equipment And Procedures
    - Pharmacology And Clinical Procedures
    - Medical Office Laboratory Techniques
    - Clinical Laboratory Procedures
    - Medical Assisting

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

MEDICAL ASSISTING (12-25)

12.0 Demonstrate knowledge of emergency equipment and procedures.
13.0 Demonstrate knowledge of pharmaceutical principles and administer medications.
14.0 Demonstrate minor treatments.
15.0 Demonstrate basic office examination procedures.
16.0 Perform basic laboratory procedures.
17.0 Perform diagnostic clinical laboratory procedures.
18.0 Demonstrate knowledge of, apply and use electrocardiographic instrumentation.
19.0 Demonstrate communication skills used by medical assistants.
20.0 Demonstrate knowledge of legal responsibilities for medical assistants.
21.0 Demonstrate an understanding of anatomy and physiology.
22.0 Demonstrate basic clerical/medical office duties.
23.0 Perform basic medical assisting procedures.
24.0 Demonstrate basic x-ray procedures.
25.0 Demonstrate knowledge of the fundamentals of microbial control and use aseptic techniques.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Medical Assisting
Postsecondary Number: H170503

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis..

07.02 Demonstrate knowledge of surgical asepsis.

07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.

08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.

09.02 Secure information about a job.

09.03 Identify documents that may be required when applying for a job.

09.04 Complete a job application form correctly.

09.05 Demonstrate competence in job interview techniques.

09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

09.07 Identify acceptable work habits.

09.08 Demonstrate knowledge of how to make job changes appropriately.

09.09 Demonstrate desirable health habits.

09.10 Recognize appropriate affective/professional behavior.

09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.

10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

OCCUPATIONAL COMPLETION POINT - DATA CODE A
MEDICAL ASSISTING - OES Code 66005443

EMERGENCY EQUIPMENT AND PROCEDURES--The following student performance standards have competencies in common with Respiratory Care Technician, Practical Nursing and Medical Laboratory Technology (Certificate) and should be taught together as a module called EMERGENCY EQUIPMENT AND PROCEDURES. Licensed Respiratory Care Technicians, Licensed Practical Nurses, and Licensed Medical Laboratory Technicians do not have to complete this module.

12.0 DEMONSTRATE KNOWLEDGE OF EMERGENCY EQUIPMENT AND PROCEDURES--The student will be able to:

12.01 Maintain emergency equipment and supplies.
12.02 Operate emergency equipment.
12.03 Implement emergency procedures as indicated.

PHARMACOLOGY AND CLINICAL PROCEDURES--The following intended outcomes (13-15) are common to Practical Nursing and should be taught together as a module called PHARMACOLOGY AND CLINICAL PROCEDURES. Licensed Practical Nurses do not have to complete these intended outcomes.

13.0 DEMONSTRATE KNOWLEDGE OF PHARMACEUTICAL PRINCIPLES AND ADMINISTER MEDICATIONS--The student will be able to:

13.01 Identify commonly administered drugs, their uses and effects.
13.02 Use correct pharmaceutical abbreviations and terminology.
13.03 Identify various methods and routes of drug administration.
13.04 Calculate dosage and administer pharmaceuticals to correct anatomical sites, to correct patient, by correct route of administration, at the correct time and chart correctly.
13.05 Demonstrate knowledge of the legal and ethical standards related to the administration and the dispensing of drugs in the office setting under the doctor's supervision.
    13.05.01 Prepare and administer non-parenteral medications (solid & liquids).
    13.05.02 Prepare and administer parenteral medications.
    13.05.03 Reconstitute powdered drugs.
    13.05.04 Prepare injections from ampules and vials.
    13.05.05 Administer intradermal injections.

13.05.06 Administer subcutaneous injections.
13.05.07 Administer intramuscular injections.
13.05.08 Administer z-track intramuscular injections.
13.05.09 Administer Tine test.

14.0 DEMONSTRATE MINOR TREATMENTS--The student will be able to:

14.01 Instruct patients regarding self administration of medications.
14.02 Perform minor treatments as directed by the physician including hot and cold therapy, (which includes, but is not limited to the following: hot water bag, heating pad, hot soaks and compresses, ice bag, cold compresses and packs.)
14.03 Assist the physician with examination, treatment, or minor surgery.
14.04 Organize examination and treatment areas before, during, and after patient care.
14.05 Perform orthopedic procedures.(including but not limited to the following: crutch measurements and instruction in use of crutches, cane and walkers.)
14.06 Apply all types of roller bandage turns where relavent.
14.07 Perform eye irrigation.
14.08 Perform ear irrigations (and instillations).

15.0 DEMONSTRATE BASIC OFFICE EXAMINATION PROCEDURES--The student will be able to:

15.01 Prepare patients for and assist the phycisian with physical examinations including, but not limited to, pre and post-natal, male and female reproductive, rectal,and pediatric.
15.02 Measure and record vital signs recognizing abnormalities and danger signs.
15.03 Record patient data.
15.04 Instruct patient on breast self-examination.
15.05 Assist with pediatric procedures.(including, but not limited to, weighing, measuring, and collecting specimens.)
15.06 Prepare patients for diagnostic procedures.

MEDICAL OFFICE LABORATORY TECHNIQUES--The following intended outcome (16) is common to Practical Nursing and Medical Laboratory Technology (Certficate) and should be taught together as a module called MEDICAL OFFICE LABORATORY TECHNIQUES. Licensed Practical Nurses and Licensed Medical Laboratory Technicians do not have to complete this outcome.

16.0 PERFORM BASIC LABORATORY PROCEDURES--The student will be able to:

16.01 Perform Hemacult Slide Test.
16.02 Prepare specimens for outside lab tests.
16.03 Test urine specimens.
16.04 Assess color and turbidity of urine specimen.
16.05 Measure specific gravity of urine specimen.
16.06 Use and record results of Multistix Reagent Strip.
16.07 Perform Clinitest tablet test on urine specimen and record results.

16.08 Instruct patient and obtain speciman for fecal, throat, urine, and sputum tests.
16.09 Obtain capillary blood specimen using lancet and autolet methods.

CLINICAL LABORATORY PROCEDURES--The following intended outcome (17) is common to Medical Laboratory Technology (Certificate) and should be taught together as a module called CLINICAL LABORATORY PROCEDURES. Licensed Medical Laboratory Technicians do not have to complete this outcome.

17.0 PERFORM DIAGNOSTIC CLINICAL LABORATORY PROCEDURES--The student will be able to:

17.01 Collect blood specimens suitable for hematological, coagulation, and/or blood chemistry procedures by capillary puncture or venipuncture.
17.02 Demonstrate competence in the safe use and care of the clinical laboratory equipment.
17.03 Maintain a safe working environment in the clinical laboratory.
17.04 Perform urinalysis.
17.05 Collect specimens and prepare for microbiological tests.
17.06 Demonstrate the operation of a compound microscope using direct and oil immersion lens.
17.07 Prepare a biological smear.
17.08 Prepare a Gram stained smear.
17.09 Perform venipuncture using vacuum tube method.
17.10 Perform venipuncture using syringe method.
17.11 Type blood for ABO and Rh.
17.12 Perform hematocrit determination.
17.13 Perform white blood cell count.
17.14 Determine hemoglobin.
17.15 Use automated blood analyzer.
17.16 Perform serum cholesterol test.
17.17 Perform blood glucose test using glucometer test.
17.18 Perform urine pregnancy slide agglutination test.
17.19 Separate serum from whole blood using centrifuge.
17.20 Perform blood glucose test using Acucheck method.
17.21 Perform selected hematological, urinalysis and blood chemistry procedures.

BASIC ELECTROGRAPHIC INSTRUMENTATION--The following intended outcome (18) is common to Electrocardiograph Aide and Electrocardiograph Technology and should be taught together in the module called BASIC ELECTROGRAPHIC INSTRUMENTATION. Students who have completed the secondary course/program Electro-cardiograph Aide or the postsecondary program Electrocardiograph Technology do not have to complete this outcome. EKG Aides and EKG Technicians do not have to complete this outcome.

18.0 DEMONSTRATE KNOWLEDGE OF, APPLY AND USE ELECTROCARDIOGRAPHIC INSTRUMENTATION--The student will be able to:

18.01 Demonstrate proper lead placement.
18.02 Identify artifacts and mechanical problems.
18.03 Perform and assess a 12 lead ECG.

18.04 Use charting and documentation skills.
18.05 Mount electrocardiographs in patient's chart.

MEDICAL ASSISTING--The following intended outcomes (19-25) are unique to medical assisting and should be taught together in the module called Medical Assisting.

19.0 DEMONSTRATE COMMUNICATION SKILLS USED BY MEDICAL ASSISTANTS--The student will be able to:

19.01 Organize and express ideas in a concise, precise and logical manner.
19.02 Use medical terminology as appropriate for a medical assistant.
19.03 Inform patients of office policies.
19.04 Instruct patients regarding health care practices.
19.05 Describe the role of the medical assistant.

20.0 DEMONSTRATE KNOWLEDGE OF LEGAL RESPONSIBILITIES FOR MEDICAL ASSISTANTS--The student will be able to:

20.01 Provide health care within the framework of the medical assistant.
20.02 Distinguish between the liability of the physicians and staff members in the medical office.
20.03 Explain the principles for preventing medical liability.
20.04 List the principles in the Codes of Ethics for Medical Assistants as stated by the American Association of Medical Assistants.

21.0 DEMONSTRATE AN UNDERSTANDING OF ANATOMY AND PHYSIOLOGY CONCEPTS--The student will be able to:

21.01 Describe the relationships of body systems in providing patient care.
21.02 Identify cause, effect and treatment of disease processes.
21.03 Identify and define terms related to oncology.
21.04 Teach the patient and family how to apply the nutrition pyramid.

22.0 PERFORM BASIC CLERICAL/MEDICAL OFFICE DUTIES--The student will be able to:

22.01 Type and transcribe accurately.
22.02 Develop and maintain filing systems.
22.03 Operate and maintain office practices.
22.04 Apply computer concepts to office practices.
22.05 Prepare and maintain medical records.
22.06 Screen and process mail.
22.07 Schedule and monitor appointments.
22.09 Process insurance data and claims.(using procedural and diagnostic coding and adhering to current government regulations.)
22.10 Adhere to current government regulations.
22.11 Develop and maintain billing and collection system.

22.12 Maintain office inventory.
22.13 Arrange meetings and travel.
22.14 Perform general housekeeping duties.
22.15 Plan and organize daily office activities.
22.16 Keyboard documents using word processing software.
22.17 Receive patients and visitors.
22.18 Operate transcription equipment and transcribe medical records.
22.19 Perform various financial procedures.(including, but not limited to, billing and collection procedures, payroll procedures, and checkbook procedures.)
22.20 Perform office management procedures.
22.21 Identify and maintain office security policies/procedures.

23.0 PERFORM BASIC MEDICAL ASSISTING PROCEDURES--The student will be able to:

23.01 Perform visual and auditory screening.
23.02 Administer ultrasound treatment.

24.0 DEMONSTRATE BASIC X-RAY PROCEDURES--The student will be able to:

24.01 Position patients for basic x-rays.
24.02 Operate and maintain x-ray equipment/accessories.
24.03 Process x-ray film and maintain film files.
24.04 Evaluate x-ray film quality.
24.05 Describe x-ray principles and safety practices.
24.06 Instruct patient in preparation for basic x-ray examinations.
24.07 Describe x-ray equipment operation.
24.08 Use precautions and provide appropriate protection for patients and staff in the presence of ionizing radiation.
24.09 Maintain a safe working environment in radiologic work areas.

25.0 DEMONSTRATE KNOWLEDGE OF THE FUNDAMENTALS OF MICROBIAL CONTROL AND USE ASEPTIC TECHNIQUES--The student will be able to:

25.01 Demonstrate competence in sanitation, disinfection and sterilization.
25.02 Sterilize and maintain instruments and supplies.
25.03 Sanitize instruments.
25.04 Wrap articles for autoclave.
25.05 Sterilize articles in autoclave.
25.06 Chemically disinfect articles.
25.07 Practice infection control and contamination prevention.
25.08 Safely handle contaminated equipment and supplies.
25.09 Create and maintain sterile fields for dressings and minor surgery.
25.10 Prepare for minor surgical procedures.
25.16 Remove sutures.
25.17 Correctly dispose of contaminated materials.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Medical Record Transcribing
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170506**
CIP Number	0317.050601
Grade Level	30, 31
Length	900 hours
Certification	MED RECTEC @7 G MED TRANS @7 G
Basic Skills	
Math	8
Language	10
Reading	10

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as medical record transcriptionists (245.362-010) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, medical terminology, anatomy and physiology, grammar and punctuation, health care delivery systems, health information services, ethical and legal responsibilities, safety/security procedures, word processing/transcription skills and employability skills. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory facilities and equipment should be provided. Laboratory activities should be correlated with classroom activities and reinforced in the clinical area. Supervised clinical practice is an integral part of the program.

III. **SPECIAL NOTES**: Program must be taught in accordance with the accrediting standards of: American Association for Medical

BEST COPY AVAILABLE

Transcriptionist, Post Office Box 6187, Modesto, California 95355 (209/551-0883).

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C. Students should be encouraged to become members of their professional organization, and participate in the state/local chapter activities. Admissions should be limited to individuals who have the ability to type 30-45 words per minute.

The program should prepare the graduate to take the national examination to become a Certified Medical Transcriptionist.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Reading 10.0, Mathematics, 8.0, Language 10.0, and Reading 10.0. The grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program and is printed in a supplement to this document.

The typical length of this program for the average achieving student is 900 clock hours which includes 90 clock hours for the Health Careers Core.

IV. INTENDED OUTCOMES:

Occupational Completion Point Data Code A Medical Record Clerk
DOT 245-362-010

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

MEDICAL RECORD TRANSCRIBING (12-18)
12.0 Use appropriate medical and scientific terminology.
13.0 Apply rules of English grammar and punctuation.
14.0 Utilize medical references.
15.0 Operate word processing/transcription equipment.
16.0 Describe the health care delivery system.
17.0 Explain the role of health information services.
18.0 Demonstrate ethical and legal principles with regard to the use of medical records.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Medical Record Transcribing
Postsecondary Number: H170506

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis..
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

MEDICAL RECORD TRANSCRIBING - This module equals the occupational completion point of Medical Record Transciptionist.

12.0 USE APPROPIRATE MEDICAL AND SCIENTIFIC TERMINOLOGY--The student will be able to:

12.01 Spell, define and pronounce medical words and their components.
12.02 Define and use medical abbreviations.
12.03 Identify and explain structure and function of the human body.
12.04 Identify disorders and treatments of the human body.

13.0 APPLY RULES OF ENGLISH GRAMMAR AND PUNCTUATION--The student will be able to:

13.01 Recognize and use the principal parts of speech.
13.02 Recognize and use punctuation marks.
13.03 Apply rules of numerical expression.
13.04 Apply rules of capitalization.
13.05 Define and use abbreviations.
13.06 Demonstrate ability to spell words in common usage and use reference sources.
13.07 Edit and proofread transcription.
13.08 Recognize and use report formats.

14.0 UTILIZE MEDICAL REFERENCES--The student will be able to:

14.01 Use medical dictionaries and speciality word books.

14.02 Identify and use trade, generic and chemical drug names utilizing reference sources.
14.03 Identify and use diagnostic test terminology.

15.0 OPERATE WORD PROCESSING/TRANSCRIPTION EQUIPMENT--The student will be able to:

15.01 Demonstrate keyboarding skills.
15.02 Demonstrate use of transcriber.
15.03 Transcribe the following: history and physical, consultations, discharge summaries, operative reports and special reports.

16.0 DESCRIBE THE HEALTH CARE DELIVERY SYSTEM--The student will be able to:

16.01 Define health as stated by the World Health Organization.
16.02 List factors which influence the health of the individual, nation and world.
16.03 List the responsibilities of national, state and local health agencies.

17.0 EXPLAIN THE ROLE OF HEALTH INFORMATION SERVICES--The student will be able to:

17.01 Describe the organizational structure and functions of the medical record department.
17.02 Explain numbering and filing systems used in health care institutions.
17.03 Describe the development and function of the health record.
17.04 Explain the use of the health record by state, federal, accrediting and licensing agencies.

18.0 DEMONSTRATE ETHICAL AND LEGAL PRINCIPLES WITH REGARD TO THE USE OF MEDICAL RECORDS--The student will be able to:

18.01 Follow confidentiality policy for health information.
18.02 Discuss the Code of Ethics of the American Association for Medical Transcription.
18.03 Discuss the Code of Ethics of the American Medical Record Association.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Midwifery
Occupational Area: Health Science Education

PSV

CIP Number 0318.110300
Grade Level College Credits
Length AS Degree/90 credit hours

CERTIFICATION COVERAGE:

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as licensed midwives, including all other health professionals/paraprofessionals (32999231) or to provide supplemental training for persons previously or currently employed in this occupation. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

The Health Careers Core must be taken by all students (secondary, postsecondary adult, and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.
Licensed midwives are prepared to provide care for mothers who are expected to have a normal pregnancy, labor, and delivery. Midwifery graduates from approved programs are eligible to take an examination testing proficiency in the core competencies required to practice midwifery as specified in FS 553 - 467.009 CH. 92-179.

Training Requirements (FS 467.009 and Rule CH. 10 D 36)
An approved midwifery program shall include a course of study and clinical practice for a minimum of 3 years. If the applicant is a registered nurse or a licensed practical nurse or has previous nursing education or practical midwifery education experience, the required period of training may be reduced to the extent of the applicant's qualifications. In no case shall the training be reduced to a period of less than two (2) years.

According to FS 467.009 the content includes, but is not limited to all aspects of prenatal, intrapartal, and post-partal care, including obstetrics; neonatal pediatrics; basic sciences; female reproductive anatomy and physiology; behavioral sciences; childbirth education; community care; epidemiology; genetics; embryology; neonatology; applied pharmacology; the medical and legal aspects of midwifery; gynecology and women's health; family planning; nutrition during pregnancy and lactation; breast feeding and basic nursing skills.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES:** Simulated practice and clinical experiences are included as an integral part of this program.

Clinical Experience Rules: (467.009(4) F.S.)

(1) A student midwife, during training, shall undertake (under the supervision of a preceptor) the care of 50 women in each of the prenatal, intrapartal, and postpartal periods [the same women need not be seen through all three periods].

(2) The student midwife shall observe an additional 25 women in the intrapartal period before qualifying for a license.

(3) The training shall be in hospitals, alternative birth settings or both with particular emphasis on learning to differentiate between low-risk pregnancies or high-risk pregnancies.

(4) It shall be the responsibility of the program to obtain and maintain current contractual agreements with each agency utilized for student clinical training.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Students must take a licensing examination (FS 467.011). Minimal acceptable performance will be determined by The Department of Business and Professional Regulation.

The program must be approved by the Agency for Health Care Administration.

Entering students who have completed the program 0317.060500, Practical Nursing or 0318.110100 Associate Degree Nursing or have obtained an RN through another program should be given appropriate advanced standing.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for the program/cluster and is printed in a supplement to this document.

The standard credit hour length for this program is 90 credit hours according to Rule 6A-14.030.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

MIDWIFERY (12-19)

12.0 Recognize and utilize three aspects of midwifery management of care for pregnant women.

13.0 Assume responsibility for rendering antepartum care.
14.0 Assume responsibility for rendering intrapartum care.
15.0 Assume responsibility for rendering postpartum care.
16.0 Assume responsibility for rendering neonatal care.
17.0 Assumes responsibility for management of care of women seeking family planning and/or gynecologic service.
18.0 Demonstrate a knowledge of the professional role and responsibilities of midwifery.
19.0 Demonstrate basic nursing/midwifery skills.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Midwifery
POSTSECONDARY NUMBER: 0318.110300

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

MIDWIFERY: Students completing this module achieve the occupational completion point of Midwife.

12.0 RECOGNIZE & UTILIZE THREE ASPECTS OF MIDWIFERY MANAGEMENT OF CARE FOR PREGNANT WOMEN--The student will be able to:

12.01 Provide safe, effective basic health care monitoring, management, teaching and referral service for healthy women throughout the normal uncomplicated childbearing experience.
    12.01.01 Apply therapeutic communication techniques, including interviewing, counseling, and client teaching.
    12.01.02 Demonstrate basic physical assessment skills of observation, palpation, percussion, auscultation and measurement in collecting data describing current health status.
    12.01.03 Perform basic laboratory assessment, including hematocrit, hemoglobin, urine analysis, and vaginal/cervical smears.
12.02 Interpret data to identify current and potential health problems and needs.
12.03 Formulate a complete needs/problem list and establish health care goals in collaboration with the client and her family.
12.04 Identify need for consultation or referral to appropriate members of the health care team in meeting health care goals.
12.05 Provide information and support to enable clients to actively participate in their own health care management.
12.06 Develop, implement and evaluate a comprehensive plan of care with the client based on supportive, scientific rationale.
12.07 Identify those current or potential client problems requiring consultation, referral and/or co-management and obtain consultation promptly or plan and implement collaborative management with other providers.
12.08 Utilize appropriate consultation, collaboration or referral for deviations from normal and potential complications.
12.09 Establish a written protocol with a physician who maintains supervision for directing the specific course of medical treatment for the "at-risk" client.

12.10 Refer and/or transfer care of the client when the need is identified for management outside the scope of the midwife's practice.

13.0 ASSUME RESPONSIBILITY FOR RENDERING ANTEPARTUM CARE--The student will be able to:

13.01 Utilize principles of basic sciences in rendering antepartum care.
13.02 Provide basic health surveillance, anticipatory guidance and health teaching for healthy women experiencing normal, uncomplicated pregnancies.
13.03 Determine pregnancy accurately by history, physical and laboratory findings.
13.04 Assess the physical health status of the client, including preconceptual factors likely to influence this pregnancy.
13.05 Assess the psychosocial status of the client and her support system.
13.06 Identify social, cultural, environmental and occupational factors that influence the client's response to pregnancy and pregnancy related behaviors.
13.07 Assess nutritional status and provide nutritional counseling.
13.08 Differentiate between normal and pathologic adaptations to pregnancy, including hematologic changes and intervene appropriately.
13.09 Identify risk factors requiring consultation and/or referral.
13.10 Demonstrate knowledge of pharmacokinetics in administration of medications commonly used in pregnancy.
13.11 Identify current, potential and emergent problems and needs affecting pregnancy.
13.12 Differentiate between normal physiologic pregnancy, common pregnancy-related discomforts, and pathologic disorders.
13.13 Assist client in managing common minor pregnancy-related discomforts such as fatigue, nausea, heartburn, backache, leg cramps, vaginal discharge, and constipation.
13.14 Provide anticipatory guidance regarding developmental tasks of childbearing, prepared childbirth, lactation/breastfeeding and parenthood.
13.15 Assess fetal well-being, including intrauterine growth, fetal heart rate, and fetal movement through various methods such as fetal movement records, ultrasonography, NST, and OCT.
13.16 Interpret assessment data accurately to determine client and fetal health status.
13.17 Initiate consultation and/or referral as needed to safeguard health of the client and the fetus.
13.18 Discuss options in childbearing sites and practitioners to facilitate client informed choice and consent.
13.19 Refer client to appropriate community agencies, resources and educational referral services as needed.

14.0 ASSUME RESPONSIBILITY FOR RENDERING INTRAPARTUM CARE--The student will be able to:

14.01 Utilize principles of the basic sciences in rendering intrapartum care.

14.02 Describe the normal labor process, including mechanisms of labor and birth.

- 14.02.01 Differentiate between Braxton Hicks contractions, preterm labor and prodromal labor.
- 14.02.02 Assess frequency, duration, intensity of and interval between contractions.
- 14.02.03 Identify the status of the membranes.
- 14.02.04 Identify fetal presentation, position, and heart rate.
- 14.02.05 Assess cervical effacement and dilation and station of the presentating part.
- 14.02.06 Differentiate between bloody show and uterine/placental bleeding.

14.03 Demonstrate knowledge of the fetal skull and its critical landmarks.

14.04 Describe parameters and methods for assessing and managing the process of labor and delivery.

14.05 Describe parameters and methods for assessing maternal and fetal status during the stages of labor.

14.06 Demonstrate knowledge of the emotional changes during labor and delivery.

14.07 Provide comfort and support during labor and delivery including non-pharmacologic pain management techniques.

14.08 Describe and demonstrate techniques for spontaneous vaginal delivery and placental expulsion.

14.09 Identify indicators of deviations from normal labor and delivery and utilize appropriate interventions.

14.10 Assess and manage care of the perineum and surrounding tissues.

14.11 Provide immediate care to the newborn, including assessment, maintaining a patent airway and managing thermal instability.

14.12 Demonstrate knowledge of pharmacokinetics and administration of medications commonly used during labor and birth.

14.13 Explain the role and function of the midwife in relation to emergency management.

15.0 ASSUME RESPONSIBILITY FOR RENDERING POSTPARTUM CARE--The student will be able to:

15.01 Demonstrate a knowledge of and utilize principles of the basic sciences in rendering postpartum care.

15.02 Demonstrate a knowledge of anatomy and physiology of the puerperium.

15.03 Describe involution, recognize indicators of deviation from normal, and utilize appropriate intervention.

15.04 Teach methods of breast care and lactation to client utilizing anatomy and physiology of lactation.

15.05 Identify the etiology, and manage discomforts of puerperium.

15.06 Identify indicators of deviations from the normal puerperium and utilize appropriate intervention, including consultation and referral.

15.07 Demonstrate knowledge of the pharmacokinetics and administration of medications commonly used during the puerperium.
15.08 Describe the nutritional requirements of the postpartum period.
15.09 Describe the purpose and process of completing and filing a birth certificate according to Florida law.
15.10 Recognize and respond appropriately to the emotional and psychosocial changes during the puerperium.
15.11 Provide anticipatory guidance regarding client self care, infant care, family planning and alterations in family roles and expectations.
15.12 Describe and utilize appropriate screening/diagnostic tests during puerperium.

16.0 ASSUME RESPONSIBILITY FOR RENDERING NEONATAL CARE--The student will be able to:

16.01 Demonstrate a knowledge and utilize principles of the basic sciences in rendering neonatal care.
16.02 Manage the health care of the normal infant during the neonatal period and initiate consultation and referral as appropriate.
16.03 Explain anatomical and physiological adaptation to extrauterine life and stabilization of the neonate.
16.04 Facilitate adaptation to extra-uterine life including resuscitation and emergency care of the newborn.
16.05 Assess neonatal status (physical, emotional and psychosocial).
16.06 Recognize deviations from normal neonatal status and initiate appropriate intervention, management and/or referral.
16.07 Describe the components of breast milk and formula, the nutritional needs of the neonate and relationship of feeding methods to physiological, immunological and psychological development.
16.08 Demonstrate the pharmacokinetics and administration of medications and the treatments commonly used for the neonate.
16.09 Describe the rationale and methodology for the common screening/diagnostic tests performed on the neonate and utilize those appropriate to scope of practice.
16.10 Describe the factors influencing neonatal behavior and parental interaction and attachment.
16.11 Anticipate need for and provide appropriate guidance regarding infant care, breast feeding and family relationships, to include referral to community resources.

17.0 ASSUME RESPONSIBILITY FOR MANAGEMENT OF CARE OF WOMEN SEEKING FAMILY PLANNING AND/OR GYNECOLOGIC SERVICE--The student will be able to:

17.01 Demonstrate a knowledge of and utilize principles of the basic sciences in rendering family planning and/or gynecologic service.
17.02 Explain anatomy and physiology of male and female reproductive systems throughout the life cycle.
17.03 Explain anatomy, physiology and psychosocial components of human sexuality.

17.04 Recognize and respond appropriately to indications of need for sexual counseling and/or referral.
17.05 Provide counseling regarding general health promotion, as well as measures related to developmental changes throughout the life cycle.
17.06 Describe rationale and methods for common gynecological and pregnancy screening and diagnostic tests, utilizing those appropriate to scope of practice.
17.07 Describe factors relating to male and female barrier, steroidal, mechanical, chemical, physiologic and surgical conception control methods, including fertility awareness.
17.08 Explain factors involved in decision making regarding unplanned or undesired pregnancies and resources for counseling and referral, including preconceptual counseling.
17.09 Identify and describe deviations from normal status and provide appropriate preventive measures and/or interventions for selected pathology.

18.0 DEMONSTRATE KNOWLEDGE OF THE PROFESSIONAL ROLE AND RESPONSIBILITIES OF MIDWIFERY--The student will be able to:

18.01 Describe the historical development and present status of midwifery in Florida, nationally, and internationally.
18.02 Describe and practice within the laws, rules, regulations and public policies affecting midwifery practice including malpractice and litigation issues.
18.03 Utilize codes and guidelines for ethical and professional behavior, including those set by state and national professional organizations.
18.04 Describe the midwife's responsibility for ongoing self evaluation, participation in quality assurance and maintenance of currency in practice, including continuing education.
18.05 Demonstrate understanding of various sites, styles and modes of practice within midwifery - the delivery of ethnic and culturally sensitive care.
18.06 Promote health care as educator, client advocate, health care provider, social/political change agent and collaborator with other health team members.
18.07 Explain the implications of HIV infection and seropositive tests in pregnancy, childbirth, lactation, child care and seroconversion among children of HIV positive parents.

19.0 DEMONSTRATE BASIC NURSING/MIDWIFERY SKILLS--The student will be able to:

19.01 Collect appropriate data base describing current health status, including complete history, physical and psychosocial assessment.
19.02 Obtain and interpret relevant laboratory data.
19.03 Promote and maintain a safe and therapeutic environment.
19.04 Implement and maintain medical and surgical asepsis.
19.05 Use proper body mechanics.
19.06 Recognize changes in a client's condition requiring intervention with basic safety measures, including emergency interventions as specified by statute/rule.

19.07 Administer and/or supervise complete hygienic care.

19.08 Perform comfort measures such as backrub, relaxation techniques, and diversional activities.

19.09 Assess nutritional status and utilize therapeutic principles of nutrition.

19.10 Assess client elimination needs and utilize therapeutic principles of elimination such as catheterization and enemas.

19.11 Prepare and administer medications as specified by statute/rule and assess client response.

19.12 Utilize appropriate medical terminology and abbreviations.

19.13 Chart and maintain client files.

19.14 Utilize problem solving skills and judgement in midwifery practice.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Nursing (Associate Degree) R.N.
Occupational Area: Health Science Education

PSV

CIP Number 0318.110100
Grade Level College Credits
Length AS Degree/72 credit hours.

CERTIFICATION COVERAGE:

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as nurses, registered nurses (32502166), head nurses (075.127-018), private duty nurses (075.374-018), or staff nurses (075.374-022), general duty nurse (075.374-010), or to provide supplemental training for persons previously or currently employed in these occupations.

The Health Careers Core must be taken by all students (secondary, postsecondary adult, and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Associate degree nurses (ADN) are prepared to provide client services in a variety of settings. They administer care to clients experiencing defined health problems with predictable outcomes. ADN graduates are eligible to take the National Council Licensing Examination (NCLEX) for registered nurses, which predominantly tests the knowledge needed to give safe care to clients in the settings specific to the practice of associate degree graduates.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through classroom instruction and applied laboratory procedures or practice.

The location of the ADN program within the community college setting provides an appropriate academic environment for instruction in the biological, physical, social, and behavioral sciences. The community college setting further provides instruction in the communication skills basic to the successful performance of the ADN graduate in the work setting. This body of knowledge supports concepts specific to the practice of nursing.

According to the Florida Nurse Practice Act (Chapter 464, FS) and as set forth by the Florida Board of Nursing rules, Chapter 59S7, instruction shall include, but not be limited to, the following:

1. Theoretical instruction and clinical experience in medical, surgical, obstetric, pediatric, geriatric and psychiatric nursing.

There shall be instruction and clinical experience in both acute and long-term care situations.

2. Theoretical instruction and clinical application of nursing process, human growth and development through the life span, cultural diversity, community health concepts, pharmacology and administration of medications, nutrition, legal aspects of practice, interpersonal relationship and leadership skills, professional role and function, health teaching and counseling skills and current issues in nursing practice.

3. 59S7-2.006 Curriculum Guidelines

In order to ensure the preparation of nurses capable of competent practice, the curriculum shall:

a. Reflect the stated philosophy and objectives of the program.
b. Evidence an organized pattern of instruction consistent with principles of learning and sound educational practices.
c. Provide for systematic evaluation of student learning in both clinical experiences and effectiveness of graduate performance.
d. Evidence ongoing program evaluation in relation to currency of content, competency of instruction, adequacy of clinical experiences and effectiveness of graduate performance.
e. Include clinical learning experience sufficient to develop nursing skills required for safe practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Clinical instruction of nursing students will meet the rules of the Florida Board of Nursing as specified in Chapter 59S7.

59S7-2.008 Clinical Training

1. Clinical learning experiences shall be an integral part of the total curriculum plan and show relationship to concurrent theory.

2. Clinical experiences based on program objectives may be planned so that the student shall gain clinical experience on all shifts within the twenty-four (24) hour period.

3. The faculty shall select clinical experience and provide students with effective guidance and supervision in clinical learning.

4. Each student providing direct care to clients in a health care agency shall be under the supervision of a faculty member. Faculty should be responsible for supervising students on no more than two units during one clinical instruction period.

5. No more than twelve students shall be assigned to a faculty member for supervision in providing direct care to clients for any one clinical instruction period.

6. Faculty shall be physically present within the agency while students are engaged in providing direct care to clients.

7. Faculty shall be immediately available by telephone to students engaged in an observational experience or assigned to family-community health experiences.

8. Clinical facilities utilized for clinical training by students of approved programs shall provide evidence satisfactory to the Board that they meet the following requirements:

   a. Current State licensure/certification.
   b. The director of nurses or person responsible for nursing services is a registered nurse currently licensed in Florida.
   c. The number and variety of clients are sufficient to meet clinical learning objectives of the nursing program.
   d. There is nursing personnel, sufficient in number, currently licensed and appropriately qualified, to ensure that patients receive safe and effective care at all times.
   e. There are written job descriptions for all categories of nursing personnel which are used as a basis for assigning responsibilities.
   f. Appropriate references and current practice and procedure manuals are available on the floor where students receive experience.

9. Nursing programs shall seek prior approval from the Board for any clinical facility utilized for student clinical instruction.

10. It shall be the responsibility of the nursing program to obtain and maintain current contractual agreements with each agency utilized for student clinical training to ensure that the nursing program can provide the appropriate clinical experiences necessary to fulfill the requirements of these rules.

11. When more than one nursing program is using an agency for student clinical experience, there shall be written documentation of cooperative planning among the programs and the agency.

12. Preceptorships may be included in a professional curriculum when they meet all the following requirements:

   a. Written objectives are specified and given to the preceptor prior to the experience.
   b. The preceptor is approved by the faculty of the program.
   c. The preceptor shall have clinical expertise and competence in the area where serving as a preceptor.
   d. The preceptor shall be physically present in the unit and available to the student at times the student is performing in a nursing capacity with patients and clients.

e. The preceptor shall be assigned no more than two (2) students for any preceptor experience.

f. The student shall be enrolled in the course of the program in which the preceptor experience is a part and shall not be reimbursed for nursing services from the agency in which the experience is received.

g. Each student shall have a designated program faculty member who supervises the student and is readily available to the student during the time the student is performing in a nursing capacity with patients and clients.

h. The student shall have received clinical and theoretical instruction in all areas of nursing specified in Rule 210-7.025 (2) prior to any preceptor experience.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

This program must be taught by a Registered Nurse meeting the qualifications as set forth in 595-2.005(2) F.A.C.

The Health Occupations Students of America, Inc. is an appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C. The Florida Nursing Student Association or the Florida Organization for the Advancement of Associate Degree Nursing is the appropriate student professional organization.

The program must be approved by the Florida Board of Nursing. It is important that each associate degree nursing program effectively utilize the services of an active program advisory committee composed of representative employers. Only when the educators and employers work together can the associate degree nursing graduate be provided the competencies that are most needed for successful employment as a new registered nurse.

The Human Patient Simulator (HPS) may be used for a limited number of clinical hours with prior approval frm the Florida Board of Nursing. Entering students who have successfully completed the program 0317.060500, Practical Nursing, should be given appropriate advanced standing.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program/cluster and is printed in a supplement to this document.

The standard credit hour length for this program is 72 credit hours according to Rule 6A-14.030.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

NURSING (ASSOCIATE DEGREE) RN (12 - 18)

12.0 Demonstrate competencies in assessment.
13.0 Demonstrate competencies in diagnosis.
14.0 Demonstrate competencies in planning.
15.0 Demonstrate Competencies in implementation.
16.0 Demonstrate competencies in evaluation.
17.0 Demonstrate competencies as a health team member within the discipline of nursing.
18.0 Demonstrate competencies as a manager of care.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Nursing (Associate Degree) R.N.
Postsecondary Number: 0318.110100

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

ASSOCIATE DEGREE NURSING: Intended outcomes 12-18 complete the occupational exit of Associate Degree Nurse.

12.0 DEMONSTRATE COMPETENCIES IN ASSESSMENT--The student will be able to:

12.01 Demonstrate knowledge of etiology, diagnosis, and signs and symptoms for diseases processes affecting the human body.
12.02 Operate and interpret various monitoring assessment devices, including but not limited to ECG, pulse oxymeters, etc.
12.03 Recognize normal vs gross abnormal results of diagnostic tests.
12.04 Collect data relative to the client from family, significant others, health records, health care team members, and other resources.
12.05 Obtain data through assessment of the client which includes, but is not limited to monitoring, interpreting, responding to, reporting and recording, vital signs, weight, body measurements, fluid balance, skin changes, level of consciousness, and heart, lung and bowel sounds.
12.06 Recognize common alterations in client's physiological status.
12.07 Recognize common alterations in client's psychological status.
12.08 Assess client's nutritional, elimination, cardio-respiratory, and neurological status.
12.09 Assess client's environment.
12.10 Contribute assessment information to a data base.

13.0 DEMONSTRATE COMPETENCIES IN DIAGNOSIS--The student will be able to:

13.01 Identify actual or potential health care needs on the basis of assessment.
13.02 Select nursing diagnosis on the basis of analysis and interpretation of data.

14.0 DEMONSTRATE COMPETENCIES IN PLANNING--The student will be able to:

14.01 Participate with the client, family, significant others, and members of the health care team to establish client-centered goals directed toward promoting and restoring the client's optimum state of rehabilitation.
14.02 Establish priorities for care with recognition of clients' diagnoses and needs.

14.03 Develop care plan incorporating data related to the client's cultural and spiritual beliefs and physiological, psychosocial, and developmental needs and strengths.

14.04 Collaborate with other health care workers in the development of individualized teaching plans that include health counseling, discharge planning, and implementation of a therapeutic regimen.

14.05 Support clients' rights to make decisions regarding care.

15.0 DEMONSTRATE COMPETENCIES IN IMPLEMENTATION--The student will be able to:

15.01 Implement a care plan according to priority of goals.

15.02 Initiate nursing interventions in response to clients' needs.

15.03 Adjust priorities for nursing interventions as clients' situations change.

15.04 Use current technology to enhance client care.

15.05 Demonstrate safe performance of nursing skills including, but not limited to the following:

15.05.01 Implement and maintain medical and surgical asepsis.

15.05.02 Administer and/or supervise complete hygienic care.

15.05.03 Administer and/or supervise activities of daily living.

15.05.04 Teach, direct and assist with client mobility and maintenance of correct body alignment.

15.05.05 Maintain immobilization and support using, but not limited to casts, traction, splints, special beds/frames, slings, bandages, binders, and/or anti-embolism stockings.

15.05.06 Utilize therapeutic principles of nutrition and diet therapy, including parenteral nutrition and tube feedings.

15.05.07 Perform comfort measures including, but not limited to back rub, sitz baths, relaxation techniques, recreational activities and diversional activities.

15.05.08 Utilize therapeutic principles of elimination including, but not limited to bowel and bladder training, catheterization and catheter care, ostomy care, and enemas.

15.05.09 Perform therapeutic cardio-respiratory procedures such as maintenance of oxygen therapy, suctioning, tracheostomy care, coughing and deep breathing, special positioning, and care of clients with chest tubes.

15.05.10 Perform therapeutic musculo-skeletal procedures such as pin care, relief of pain, mobility exercises, and facilitation of adjustment to altered body image.

15.05.11 Perform therapeutic procedures utilizing dry and moist heat and cold.

15.05.12 Perform gynecological/obstetrical therapeutic procedures including but not limited to labor management, vaginal douches, perineal, fundal, suture, breast care, personal counseling for altered sexual function.

15.05.13 Utilize psychiatric therapeutic principles such as reality therapy, behavior modification, group therapy, and milieu therapy.
15.05.14 Perform, supervise, and teach pre-operative and post-operative procedures.
15.05.15 Transcribe and implement client orders.
15.05.16 Apply nursing principles/knowledge in emergency/disaster situations.
15.05.17 Administer medications utilizing a knowledge of pharmacokinetics and responding to adverse reactions appropriately.

15.06 Promote the rehabilitation potential of the client.
15.07 Administer and monitor the prescribed medical regimen for the client undergoing diagnostic tests and/or therapeutic procedures.
15.08 Promote psychological safety of the client.
15.09 Demonstrate caring behavior in providing nursing care.
15.10 Utilize communication techniques that assist the client, family, and significant others to cope with and resolve problems.
15.11 Communicate verbally and in writing client behaviors, responses to nursing interventions, and responses to medical regimen.
15.12 Implement teaching plans that are specific to the client's level of development, knowledge and learning needs.

16.0 DEMONSTRATE COMPETENCIES IN EVALUATION--The student will be able to:

16.01 Determine the effects of nursing interventions on the status of the client.
16.02 Participate with the client, family, significant others, and members of the health care team in the evaluation of client's progress toward goals.
16.03 Revise care plan as needed.

17.0 DEMONSTRATE COMPETENCY AS A HEALTH TEAM MEMBER WITHIN THE DISCIPLINE OF NURSING--The student will be able to:

17.01 Practice within the legal and ethical framework of nursing.
17.02 Maintain confidentiality of information regarding clients as prescribed by the Nursing Code of Ethics.
17.03 Report concerns regarding quality of care to the appropriate person.
17.04 Describe the value of nursing as a career and the value of one's own practice.
17.05 Support peers and other workers in the delivery of client care.
17.06 Recognize and report ethical dilemmas encountered in practice.
17.07 Serve as a role model to members of the nursing team.
17.08 Use information from current literature to provide safe nursing care.
17.09 Discuss the importance of nursing research in advancing nursing practice.
17.10 Describe the necessity for continuous learning and self-development.

17.11 Use constructive criticism and suggestions for improving nursing practice.

18.0 DEMONSTRATE COMPETENCE AS A MANAGER OF CARE--The student will be able to:

18.01 Establish priorities for nursing care for a group of clients.
18.02 Delegate aspects of nursing care to other health care workers commensurate with their educational preparation and experience.
18.03 Be (and describe the process of being) accountable for nursing care delegated to other workers.
18.04 Assist other nursing personnel to develop skills in providing nursing care.
18.05 Interact with other members of the health care team in a collegial manner.
18.06 Utilize proper channels of communication to accomplish goals related to delivery of client care.
18.07 Provide for continuity of care within the institution.
18.08 Serve as an advocate for clients.
18.09 Recognize situations beyond the nurse's knowledge and experience and refer to the correct member of the health team.
18.10 Utilize current technology to increase efficiency of management of client care and resources.
18.11 Practice in a cost effective manner.
18.12 Recognize and meet basic human needs manifested throughout the life cycle in each aspect of nursing care.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Occupational Therapy Assistant
Occupational Area: Health Science Education

PSV

CIP Number 0317.080800
Grade Level College Credits
Length AS Degree/70 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as occupational therapy assistants (66021447), (076.364-010), or to provide supplemental training for persons previously or currently employed in this occupation.

The program prepares students to assist an occupational therapist in implementing the plan of therapy for a patient prescribed by a physician.

The content includes, but is not limited to, communication and interpersonal skills, health-illness-health concepts, specific life tasks and skills, occupational therapy principles and application, and employability skills, health and safety including CPR, anatomy and physiology, kinesiology, psychology, sociology, and gerontology. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: The occupational therapy activity lab should provide students practice in dressing, bathing, feeding, kitchen and home-making activities, and techniques for the disabled; acquaint the students with splinting and bracing methods and materials, slings, and splinting substitutes; acquaint the students with sources of supplies and adaptive equipment and the care and maintenance of same; and enable the students to acquire skills in life tasks and activities.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of

Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The program should meet the guidelines the Accrediation Council for Occupational Therapy Education (ACOTE), 1383 Picard Drive (P. O. Box 1725) Rockville, MD 20849-1725, 301/948-9626 and of the American Occupational Therapy Association so that program completers will be eligible to take the national certification examination administered by the American Occupational Therapy Association. Florida requires licensing of graduates by the Agency for Health Care Admimistration (AHCA) through the Florida Board of Medical Examiners for persons completing programs approved by the American Occupational Therapy Association. This program must be in accordance with the AHCA, Board of Medicine Occupational Therapy Council Chapter 468, part III, F.S. and Rule Chapters 59R-60, F.A.C.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 70 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES:**

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OCCUPATIONAL THERAPY ASSISTING (12-19)

12.0 Demonstrate ability to communicate and use interpersonal skills effectively for the occupation.
13.0 Demonstrate an understanding of and apply health-illness-health concepts.
14.0 Analyze and apply learned skills in specific life tasks and activities.
15.0 Apply occupational therapy principles in patient/client relationship.
16.0 Demonstrate knowledge of ethics related to occupational therapy assistants.
17.0 Transport patients.
18.0 Discuss the etiology, progression, management, and prognosis of physical, emotional, and environmental stresses and trauma.
19.0 Discuss the effect of stress on optimal human functioning.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Occupational Therapy Assistant
Postsecondary Number: 0317.080800

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

OCCUPATIONAL THERAPY ASSISTANT: The completion of intended outcomes 12-19 lead to the occupational completion point of occupational therapy assistant. The program should meet the guidelines of the American Occupational Therapy Association so that program completers will be eligible to take the national certification examination administered by the American Occupational Therapy Association. Florida requires licensing of graduates by the AHCA through the Florida Board of Medical Examiners for persons completing programs approved by the ACOTE. This program must be in accordance with the Department of Business and Professional Regulations Board of Medicine Occupationsl Therapy Council Chapter 468, part III, F.S. and Rule Chapters 61F6-12 to 61F6-15, F.A.C.

12.0 DEMONSTRATE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY FOR THE OCCUPATION--The student will be able to:

12.01 Demonstrate awareness of self and relationship with others.
12.02 Conduct didactic and group discussions.
12.03 Record/report observations.
12.04 Instruct individuals and groups.

13.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY HEALTH-ILLNESS-HEALTH CONCEPTS--The student will be able to:

13.01 Explain occupation as a health determinant.
13.02 Describe the basic function of the human body with particular emphasis on the neurological, musculoskeletal and cardiopulmonary systems.
13.03 Describe the basic development of personality and learning.
13.04 Describe appropriate life tasks as related to the developmental process from birth to death.
13.05 Identify and describe disabling conditions commonly referred to occupational therapy.
13.06 Explain the role of occupational therapy as a profession.
13.07 Explain the relationship of occupational therapy to other health care workers.

14.0 ANALYZE AND APPLY LEARNED SKILLS IN SPECIFIC LIFE TASKS AND ACTIVITIES--The student will be able to:

14.01 Demonstrate skill in performing selected life tasks and activities.

14.02 Demonstrate skill in instructing and adapting selected life tasks and activities.
14.03 Analyze activities.
14.04 Demonstrate proper care and maintenance of equipment and supplies used in occupational therapy.

15.0 APPLY OCCUPATIONAL THERAPY PRINCIPLES IN PATIENT/CLIENT RELATIONSHIP--The student will be able to:

15.01 Contribute to initial screening of patients/clients.
15.02 Contribute to evaluation of occupational performance, performance components, and life space.
15.03 Plan occupational therapy programs to prevent deterioration of occupational performance.
15.04 Contribute to occupational therapy program planning for remediation of occupational performance deficits and performance component dysfunction.
15.05 Implement occupational therapy program to prevent deterioration of occupational performance.
15.06 Contribute to implementation of occupational therapy programs to restore and develop occupational performance.
15.07 Contribute to the implementation of occupational therapy programs to restore, develop, or prevent the deterioration of performance components.
15.08 Contribute to program administration and support.
15.09 Function in the role of supervisee and assist with supervision of aides and volunteers.

16.0 DEMONSTRATE KNOWLEDGE OF ETHICS RELATED TO OCCUPATIONAL THERAPY ASSISTANTS--The student will be able to:

16.01 Describe the relationship of the occupational therapy assistant to:
    16.01.01 the physician
    16.01.02 the occupational therapist
    16.01.03 the employer
16.02 Explain the term "risk management".
16.03 Explain to patient what you are going to do before you begin.
16.04 Explain the process of applying for a Florida license.
16.05 Identify documents which may be required when applying for a license.

17.0 TRANSPORT PATIENTS--The student will be able to:

17.01 Transfer patient from bed to wheelchair.
17.02 Move wheelchair via corridors, elevators, cars, etc.
17.03 Provide information to patient as needed.

18.0 DISCUSS THE ETIOLOGY, PROGRESSION, MANAGEMENT, AND PROGNOSIS OF PHYSICAL, EMOTIONAL, AND ENVIRONMENTAL STRESSES AND TRAUMA--The student will be able to:

18.01 Discuss the "self fulfilling prophecy" concept as related to outcome after severe trauma, alteration of body image and self concept.
18.02 List the symptoms of stress in progressive order.
18.03 Define psychosomatic illness.
18.04 Define prognosis.

19.0 DISCUSS THE EFFECT OF STRESS ON OPTIMAL HUMAN FUNCTIONING--The student will be able to:

19.01 Define stress in terms of physical assessment.
19.02 List three positive effects of stress.
19.03 Discuss stress as a motivator in improving human performance.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Ophthalmic Dispensing
Occupational Area:	Health Science Education
	PSV
CIP Number	0317.070100
Grade Level	College Credits
Length	AS Degree/72 credit hours

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as dispensing opticians (299.474-010), optician apprentices, dispensing (713.361-010), opticians: dispensing and measuring (32514220) or opticians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, lens surfacing, finishing and mounting; dispensing of completed prescriptions; fitting contact lenses; frame repair, business management techniques and human relations. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Clinical and/or commercial laboratory experiences are integrated with the didactic portion of this program.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The program must be approved by the Commission on Opticianry Accreditation, 1011 Martin Luther King Highway, Suite 100; Bowie, Maryland 20720 (301/459-8075).

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Graduates of a recognized program with an A.S. Degree are eligible to take the Florida optician licensure examination administered by the Department of Business and Professional Regulation for the Board of Opticianry (Chapter 484 F.S. Rule Chapter 21, F.A.C.).

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 72 credit hours according to Rule 6A-14.030.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.

08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OPHTHALMIC DISPENSING (12-23)

12.0 Surface ophthalmic lenses.
13.0 Edge and finish lenses.
14.0 Insert and mount lenses.
15.0 Select and order frames and lenses.
16.0 Fit and dispense prescriptions.
17.0 Fit contact lenses.
18.0 Repair frames.
19.0 Demonstrate knowledge of office management.
20.0 Practice effective business management operation techniques.
21.0 Demonstrate knowledge of anatomy and physiology of the eye.
22.0 Demonstrate knowledge of the effects ophthalmic devices have in correcting the errors of human vision.
23.0 Practice technical and business computer functions.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Ophthalmic Dispensing
Postsecondary Number: 317.070100

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.

07.02 Demonstrate knowledge of surgical asepsis.

07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.

08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.

09.02 Secure information about a job.

09.03 Identify documents that may be required when applying for a job.

09.04 Complete a job application form correctly.

09.05 Demonstrate competence in job interview techniques.

09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

09.07 Identify acceptable work habits.

09.08 Demonstrate knowledge of how to make job changes appropriately.

09.09 Demonstrate desirable health habits.

09.10 Recognize appropriate affective/professional behavior.

09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.

10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

OPTHALMIC DISPENSING: The completion of this module is the occupational exit of Dispensing Optician. Graduates of a recognized program with an A.S. Degree are eligible to take the Florida optician licensure examination administered by the Department of Business and Professional Regulation for the Board of Opticianry (Chapter 484 F.S. Rule Chapter 21, F.A.C.).

12.0 SURFACE OPHTHALMIC LENSES--The student will be able to:

12.01 Layout single vision and multi-focal lenses.
12.02 Grind, fine and polish single vision lenses and/or multi-focal lenses.
12.03 Select lenses and supplies.
12.04 Inspect lenses.

13.0 EDGE AND FINISH LENSES--The student will be able to:

13.01 Layout and block lenses.
13.02 Machine and hand edge lenses.
13.03 Inspect lenses.
13.04 Air temper glass lenses.
13.05 Chemical temper glass lenses.
13.06 Tint hard resin lenses.
13.07 Select appropriate lenses.

14.0 INSERT AND MOUNT LENSES--The student will be able to:

14.01 Insert lenses into zyl frames.
14.02 Insert lenses into metal frames.
14.03 Mount lenses into rimless and semi-rimless mountings or other appropriate designs.
14.04 Perform final inspection of eye glasses.
14.05 Demonstrate knowledge of lens accessories.

15.0 SELECT AND ORDER FRAMES AND LENSES--The student will be able to:

15.01 Analyze written prescriptions.
15.02 Duplicate prescriptions from existing lenses.
15.03 Evaluate patient's life-style needs.
15.04 Use selected instruments to assist in the calculation of fitting measurements.

15.05 Calculate lens size and availability.
15.06 Discuss charges with patients.
15.07 Order lenses and frames.

16.0 FIT AND DISPENSE PRESCRIPTIONS--The students will be able to:

16.01 Verify finished prescriptions to specifications.
16.02 Align frames.
16.03 Adjust and fit optical devices to patients.

17.0 FIT CONTACT LENSES--The student will be able to:

17.01 Analyze prescriptions.
17.02 Evaluate patient suitability.
17.03 Use selected instruments to conduct and assess fittings.
17.04 Identify types of contact lenses.
17.05 Conduct patient training.
17.06 Outline potential complications.
17.07 Conduct follow-up evaluations.

18.0 REPAIR FRAMES--The student will be able to:

18.01 Restore finish and replace/repair decorative trim on frames.
18.02 Replace/repair nose pieces on zyl or metal frames.
18.03 Solder metal frames.
18.04 Replace/repair temples, front pieces, monofilament, and broken hinges.
18.05 Reshape damaged frames to lenses.
18.06 Replace/repair temples.
18.07 Modify frames for special needs.

19.0 DEMONSTRATE KNOWLEDGE OF OFFICE MANAGEMENT--The student will be able to:

19.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
19.02 Maintain and file patient records.
19.03 Bill and collect current and overdue accounts.
19.04 Practice office supply control.

20.0 PRACTICE EFFECTIVE BUSINESS MANAGEMENT OPERATION TECHNIQUES--The student will be able to:

20.01 Develop a small business plan of operation.
20.02 Develop an office policy/procedure manual.
20.03 Demonstrate knowledge of business finance and operating expenses.
20.04 Set up a pay scale and benefit program for employees and a bookkeeping system.
20.05 Demonstrate knowledge of tax forms, payroll records, insurance needs and inventory needs.
20.06 Demonstrate knowledge of employee hiring and orientation.

21.0 DEMONSTRATE KNOWLEDGE OF ANATOMY AND PHYSIOLOGY OF THE EYE--The student will be able to:

21.01 Demonstrate understanding of the interrelationships between body systems.
21.02 Diagram and explain the anatomy of the visual system.
21.03 Recognize and discuss physiological conditions of the eye.

22.0 DEMONSTRATE KNOWLEDGE OF THE EFFECTS OPHTHALMIC DEVICES HAVE IN CORRECTING THE ERRORS OF HUMAN VISION--The student will be able to:

22.01 Demonstrate knowledge of basic mathematical principles that are involved in opthalmic and geometrical optics.
22.02 Describe the influence of thick and thin prisms on the behavior of light.
22.03 Apply the principles of light acting on curved single refracting surface to the optice of ophthalmic lenses for parallel and nonparallel light.
22.04 Describe the relationship and optical properties of cylindrical lenses.
22.05 Demonstrate knowledge of the theory of lens surface power measuring devices.
22.06 Create and eliminate prismatic effect by decentration.
22.07 Demonstrate the influence of lens thickness and surface curvature.

23.0 PRACTICE TECHNICAL AND BUSINESS COMPUTER FUNCTIONS--The student will be able to:

23.01 Demonstrate knowledge of technical computer functions.
23.02 Demonstrate knowledge of business applications of computers.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Ophthalmic Technician
Occupational Area:	Health Science Education
	PSV
CIP Number	0317.070101
Grade Level	College Credits
Length	AS Degree/72 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as ophthalmic technicians, opticians: dispensing and measuring (32514220), optical goods workers (89917750) or provide supplemental training for persons previously or presently employed in this occupation.

The program is designed to provide the medical community of ophthalmology with workers who, under the supervision of an ophthalmologist, aid in the treatment of eye conditions and diseases. The curriculum provides students an opportunity to develop technical and social skills through experiences in the clinic, classroom, and laboratory. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

The program will enable students (1) to perform specified ophthalmologic tests and procedures with skill, (2) understand and practice the art of ophthalmologic assisting, thereby providing the patient with medical care of the highest quality and accuracy, (3) to become members of the health care team who contribute to the physical and psychological comfort of the patient, (4) to provide a system of quality assurance for both equipment and treatment delivery, (5) and to understand the importance of maintaining membership in the professional organizations and keeping abreast of the changes in the field of ophthalmology.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Ophthalmologists' offices provide clinical experiences for students to practice state-of-the-art ophthalmic assisting. Students must be under the direct supervision of a qualified Ophthalmologist.

Clinical education has been established for students in this program to permit accurate assessment of the knowledge, skills, and abilities of students in the clinical component of the program. After completion of the prerequisite practice of ophthalmic assisting procedures, students indicate to the faculty their readiness for evaluation of competence in a specific competency category/procedure.

Multiple affiliates are utilized for the clinical activities which provide equitable opportunities for the student to achieve the program clinical objectives. The resulting clinical rotations provide students with the technical skills for the ophthalmic medical technician.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 72 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES**:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.

04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OPHTHALMIC TECHNICIAN (12-25)

12.0 Demonstrate the taking of a medical history.
13.0 Demonstrate the performance of diagnostic tests.
14.0 Demonstrate anatomical and functional ocular measurements.
15.0 Demonstrate testing of ocular functions (including visual acuity and visual fields).
16.0 Demonstrate the administration of topical ophthalmic and oral medications.
17.0 Demonstrate the instruction of the patient in personal eye care and in the use of contact lenses.
18.0 Demonstrate the caring for and maintaining of ophthalmic instruments.
19.0 Demonstrate the caring for, maintaining and sterilizing of surgical instruments.
20.0 Demonstrate the maintaining of ophthalmic office equipment.
21.0 Demonstrate assisting in ophthalmic surgery in the office or hospital.
22.0 Demonstrate the taking of optical measurements including A-scan.
23.0 Demonstrate assisting in the fitting of contact lenses.
24.0 Demonstrate the adjusting and making of minor repairs on spectacles.
25.0 Describe other tasks as may be delegated consistent with sound medical practice (e.g. use of computerized ophthalmic equipment).

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Ophthalmic Technician
POSTSECONDARY NUMBER: 317.070100

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

OPTHALMIC TECHNICIAN: Students completing this module meet the qualifications for Dispensing and Measuring Opticians.

12.0 DEMONSTRATE THE TAKING OF A MEDICAL HISTORY--The student will be able to:

12.01 Communicate effectively in written and oral communications.
12.02 Use appropriate medical terminology in recording the medical history.
12.03 Maintain patient confidentiality.
12.04 Maintain applicable ethical and legal standards.
12.05 Identify body structures and describe the physiological processes of the eye.

13.0 DEMONSTRATE THE PERFORMANCE OF DIAGNOSTIC TESTS--The student will be able to:

13.01 Perform competently within the scope of training and education.
13.02 Accept responsibility for professional actions.

14.0 DEMONSTRATE ANATOMICAL AND FUNCTIONAL OCULAR MEASUREMENTS--The student will be able to:

14.01 Describe the principles of human physiology.
14.02 Identify and describe tissues and cellular structures of the eye.
14.03 Apply the correct medical terminology to body structures and functions of the eye.
14.04 Identify cause and effect of the most common pathological conditions of each body system as they relate to the eye.

15.0 DEMONSTRATE TESTING OF OCULAR FUNCTIONS (INCLUDING VISUAL ACUITY AND VISUAL FIELDS)--The student will be able to:

15.01 Describe the interaction of light, lenses, laws of optics.
15.02 Describe optical properties of the human eye.
15.03 Measure objectively and subjectively the refractive state of the eye.

16.0 DEMONSTRATE THE ADMINISTRATION OF TOPICAL OPHTHALMIC AND ORAL MEDICATIONS--The student will be able to:

16.01 Identify commonly administered drugs, their uses and effects upon the human body.
16.02 Identify the correct abbreviations and terminology relating to pharmaceutical preparations.
16.03 Identify the various routes of drug administration.
16.04 Describe the legal records necessary for the administration and dispensing of drugs by the physician.
16.05 Describe the ethical standards necessary for the administration and dispensing of drugs by the physician.
16.06 Administer and record specified topical and oral medications at the direction of the physician and in accordance with medical standards.
16.07 Identify security procedures of medications as regulated by law.
16.08 Describe appropriate procedures for the disposition of medications and clinical supplies in reference of shelf-life expectancies and/or expiration dates.

17.0 DEMONSTRATE THE INSTRUCTION OF THE PATIENT IN PERSONAL EYE CARE AND IN THE USE OF CONTACT LENSES--The student will be able to:

17.01 Instruct the patient in the correct methods of insertion and removal of the contact lenses.
17.02 Instruct the patient in the appropriate methods of daily care of the eye and the contact lenses.

18.0 DEMONSTRATE THE CARING FOR AND MAINTAINING OF OPHTHALMIC INSTRUMENTS--The student will be able to:

18.01 Describe the fundamental principles of the maintenance, inventory control, and ordering of ophthalmic instruments.
18.02 Maintain a clinic inventory of the instruments.
18.03 Describe the appropriate safety/security procedures for the instruments.

19.0 DEMONSTRATE THE CARING FOR, MAINTAINING AND STERILIZING OF SURGICAL INSTRUMENTS--The student will be able to:

19.01 Describe the fundamentals of microbial control.
19.02 Describe procedures for sterilization, disinfection and sanitation.
19.03 Describe methods for control of infection and prevention of contamination in the medical facility.
19.04 Describe the appropriate procedure for the handling of contaminated equipment and supplies.
19.05 Describe the appropriate method for disposal of contaminated materials.
19.06 Describe and accurately perform handwashing techniques.

20.0 DEMONSTRATE THE MAINTAINING OF OPHTHALMIC OFFICE EQUIPMENT--The student will be able to:

20.01 Describe the fundamental principles of the maintenance, inventory control, and ordering of ophthalmic supplies and equipment.
20.02 Maintain and inventory of office equipment.
20.03 Apply appropriate safety/security procedures for equipment.
20.04 Perform quality assurance procedures on all clinical equipment.
20.05 Describe and perform appropriate maintenance programs for various ophthalmic equipment.

21.0 DEMONSTRATE ASSISTING IN OPHTHALMIC SURGERY IN THE OFFICE OR HOSPITAL--The student will be able to:

21.01 Describe the fundamentals of microbial control.
21.02 Describe the procedures for sanitation, disinfection, and sterilization.
21.03 Describe methods for infection control and prevention of contamination in the medical facility.
21.04 Describe procedures for safe handling of contaminated equipment and supplies.
21.05 Describe the appropriate method and demonstrate appropriate handwashing techniques.
21.06 Describe the appropriate method for creating and maintaining sterile fields for dressings and minor surgery.
21.07 Describe the correct methods for disposal of contaminated materials.
21.08 Describe the appropriate methods for sterilizing and preparing surgical instruments.
21.09 Maintain and use aseptic technique when applicable.
21.10 Prepare the examination and treatment in accordance with the appropriate sterile or aseptic technique.
21.11 Describe the appropriate methods of assisting the physician with various minor office surgical procedures.

22.0 DEMONSTRATE THE TAKING OF OPTICAL MEASUREMENTS INCLUDING A-SCAN--The student will be able to:

22.01 Describe the fundamentals of extraocular muscle balance and binocular vision.
22.02 Test ductions and versions.
22.03 Perform cover tests.
22.04 Perform basic tests to evaluate binocular vision.

23.0 DEMONSTRATE ASSISTING IN THE FITTING OF CONTACT LENSES--The student will be able to:

23.01 Describe the principles and utilization of hard, soft and gas permeable lenses.
23.02 Assist in the fitting and evaluation of contact lenses.
23.03 Provide patient education relative to wearing and maintaining contact lenses.

24.0 DEMONSTRATE THE ADJUSTING AND MAKING OF MINOR REPAIRS ON SPECTACLES--The student will be able to:

24.01 Describe the principles of ophthalmic patient services.
24.02 Make simple and minor repairs to spectacles such temple adjustments and adjustment of the nose piece.
24.03 Adjust the spectacles to patient comfort.

25.0 DESCRIBE OTHER TASKS AS MAY BE DELEGATED CONSISTENT WITH SOUND MEDICAL PRACTICE (E.G. USE OF COMPUTERIZED OPHTHALMIC EQUIPMENT)--The student will be able to:

25.01 Describe the appropriate application of various tests and procedures.
25.02 Recognize any deviation from the normal test results.
25.03 Describe procedures for collecting, labeling, preserving, staining and culturing of specimens from patients with ocular problems.
25.04 Give appropriate instructions to patients.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Optometric Assisting
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170704**
CIP Number	0317.070501
Grade Level	30, 31
Length	1350 hours
Certification	TEC OPTICS @7 G OPTOM ASST @7 G
Basic Skills	
Math	9
Language	11
Reading	11

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as optometric assistants, opticians: dispensing and measuring, (079.364-014) or to provide supplemental training for persons previously or currently employed in this occupation.

The content includes, but is not limited to, basic instruction in anatomy and physiology, CPR, Heartsaver, office practices and dispensing of visual devices. Because optometrists now deal with certain drugs, students need knowledge of diagnostic and therapeutic drugs under supervision. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Students are prepared to assist in performing tests to determine defects in vision, preparing and fitting eyeglasses and contact lenses, and administering corrective eye exercises and other treatments under the supervision of a person licensed under FL Statutes 458, 459, 463 or 4841.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Students should be strongly encouraged to take the Registry examination offered by the Paraoptometric Section of the American Optometric Association.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 9.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The typical length of this program for the average achieving student is 1350 clock hours which includes 90 clock hours for the Health Careers Core.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OPTOMETRIC ASSISTANT - (12-18)

12.0 Report and record patient information.
13.0 Demonstrate knowledge of business management techniques.
14.0 Performs delivery of optical devices.
15.0 Perform and assist in procedures used in visual testing.
16.0 Perform special procedures.
17.0 Demonstrate knowledge of the refractive status of the eye and binocularity.
18.0 Demonstrate knowledge of basic ocular anatomy and physiology.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Optometric Assisting
POSTSECONDARY NUMBER: H170704

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

OPTOMETRIC ASSISTANT - DOT Code 079.364-014 (12-18)
The completion of this module prepares the student for the occupational completion point of Optometric Assistant.

12.0 REPORT AND RECORD PATIENT INFORMATION--The student will be able to:

12.01 Properly identify patients.
12.02 Obtain specified data from patient and family regarding visual status.
12.03 Receive and give oral report of patient's visual status.
12.04 Report and record pertinent observations of visual status.
12.05 Utilize verbal and written information to assist with the plan of care for the patient..

13.0 DEMONSTRATE KNOWLEDGE OF BUSINESS MANAGEMENT TECHNIQUES--The student will be able to:

13.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
13.02 Demonstrate the use of several means of communication.
13.03 Maintain and file patient records.
13.04 Bill and collect current and overdue accounts.
13.05 Practice office supply control.
13.06 Demonstrate knowledge of medical terminology.
13.07 Practice accepted work ethic.
13.08 Maintain basic equipment.
13.09 Schedule patients.
13.10 Complete and file third party forms.
13.11 Type 25 words per minute correctly.

14.0 PERFORM DELIVERY OF OPTICAL DEVICES--The student will be able to:

14.01 Transcribe and interpret prescriptions.
14.02 Neutralize and verify lenses.
14.03 Edge and insert lenses.
14.04 Select and order lenses.
14.05 Adjust, dispense and repair spectacles.
14.06 Assist patients with frame and lens selection.
14.07 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.

14.08 List the types of repairs which can be performed on plastic and metal frames and describe how these repairs are accomplished.

15.0 PERFORM AND ASSIST IN PROCEDURES USED IN VISUAL TESTING--The student will be able to:

15.01 Perform vision screening and preliminary testing.
15.02 Measure and record visual acuity.
15.03 Measure and record color vision.
15.04 Measure and record stereo acuity.
15.05 Take and record patient histories.
15.06 Perform chairside assisting.
15.07 Describe components of and instrumentation used in comprehensive vision evaluation.

16.0 PERFORM SPECIAL PROCEDURES--The student will be able to:

16.01 Assist in fitting contact lenses.
16.02 Instruct patients in care and handling of contact lenses.
16.03 Use selected instruments to verify contact lenses.
16.04 Demonstrate knowledge of the advantages and disadvantages of various contact lens materials and designs.
16.05 Instruct patients in visual therapy.
16.06 Measure and record intraocular pressure.
16.07 Measure and record a visual field.
16.08 Take and record blood pressure.
16.09 Perform First Aid and CPR.
16.10 Demonstrate knowledge of diagnostic and therapeutic drugs.

17.0 DEMONSTRATE KNOWLEDGE OF THE REFRACTIVE STATUS OF THE EYE AND BINOCULARITY--The student will be able to:

17.01 Demonstrate knowledge of refractive errors.
17.02 Demonstrate knowledge of visual deficiencies.
17.03 Demonstrate knowledge of ocular motility.
17.04 Demonstrate knowledge of binocular vision.
17.05 Demonstrate ability to communicate knowledge to patients.
17.06 Demonstrate the ability to recognize sight threatening emergencies.

18.0 DEMONSTRATE KNOWLEDGE OF BASIC OCULAR ANATOMY AND PHYSIOLOGY--The student will be able to:

18.01 Demonstrate knowledge of ocular anatomy.
18.02 Demonstrate knowledge of ocular physiology.
18.03 Demonstrate knowledge of pathological and functional disorders of the eye.
18.04 Correlate general health as it relates to ocular health.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Paramedic
Occupational Area:	Health Science Education
	PSVC
CIP Number	0317.020600
Grade Level	College Credits
Length	Certificate/1000 hours

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students as paramedics. The program must be approved by the Department of Health and Rehabilitative Services, Office of Emergency Medical Services; and the curriculum must adhere to the U.S. Department of Transportation (DOT) Emergency Medical Technician-Paramedic National Standard Curriculum.

The content includes, but is not limited to, the six divisions of the DOT Curriculum: prehospital environment, preparatory, trauma, medical, OB/GYN/neonatal, and behaviors. The Paramedic provides emergency care to acutely ill or injured patients in primarily pre-hospital settings which are under physician direction. Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice. This program prepares students for certification as a Paramedic in accordance with standards given in Chapter 10D-66 of the Florida Administrative Code.

The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory facilities and equipment must be provided. Laboratory activities must be correlated with didactic instruction, reinforced in the clinical area, and must be supervised by an instructor. The Human Patient Simulator (HPS) may be used for a limited number of clinical hours with prior approval og governing boards and/or agencies. The Human Patient Simulator (HPS) may be used for a limited number of clinical hours with prior approval of governing boards and/or agencies.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

A Paramedic program must be taught by a Florida certified paramedic with two years experience meeting the qualifications as set forth in 10D-66.0586(5)(e) F.A.C. The program must be accredited by the Committee on Accreditation of Allied Health Education Programs (CAAHEP).

An appropriate student organization for providing the development of professionalism and leadership skills should be provided. These organizations may include HOSA, Health Occupations Students of America, Inc., or an organization of the schools choice. This suggestion was made in light of the nature of EMT and Paramedic students which includes the adult learner already involved in unions or EMS professional groups as well as the newly graduated high school senior. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Emergency Medical Technician (EMT) program completion/ certification is required for admittance into the program.

The procedures performed by a Paramedic shall be performed under the direction of a licensed physician with appropriate emergency experience.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program/cluster and is printed in a supplement to this document.

The typical length of this program for the average achieving student is 1000 hours with a community college certificate, which includes 90 clock hours for the Health Careers Core.

The Student Performance Standards for Emergency Medical Technology-Paramedic were adapted and condensed from the U.S. Department of Transportation (DOT) Emergency Medical Technician-

Paramedic National Standard Curriculum Instructor's Lesson Plans, which are incorporated by cross-reference. Administrators and instructors should refer to the DOT materials for additional details.

NOTE: When the word demonstrate is used in a standard, it shall require that actual performance and operation be accomplished, unless otherwise indicated. Simulation, explanation, and illustration may be substituted when actual operation is not feasible.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

PARAMEDIC (12-40)

12.0 Demonstrate knowledge of the paramedic profession.
13.0 Describe EMS systems.
14.0 Describe medical/legal considerations.
15.0 Describe and demonstrate EMS communications systems.
16.0 Demonstrate rescue techniques and extrication.
17.0 Describe major incident response.
18.0 Describe and manage causes of stress.
19.0 Use medical terms specific to EMS.
20.0 Demonstrate general patient assessment and initial management.
21.0 Manage airway and ventilation.
22.0 Assess and manage shock.

23.0 Demonstrate knowledge of pharmacology and administer medications.
24.0 Assess and manage trauma emergencies.
25.0 Assess and manage burn injuries.
26.0 Assess and manage respiratory emergencies.
27.0 Assess and manage cardiovascular emergencies.
28.0 Assess and manage endocrine emergencies.
29.0 Assess and manage neurological emergencies.
30.0 Assess and manage digestive, genitourinary, and reproductive emergencies.
31.0 Assess and manage anaphylaxis emergencies.
32.0 Assess and manage toxicological, alcohol, and drug abuse emergencies.
33.0 Assess and manage infectious diseases.
34.0 Assess and manage environmental injuries.
35.0 Assess and manage geriatric emergencies.
36.0 Assess and manage pediatric emergencies.
37.0 Assess and manage the gynecologic patient.
38.0 Assess and manage the obstetric patient.
39.0 Assess and manage the neonate.
40.0 Assess and manage behavioral emergencies.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Paramedic
POSTSECONDARY NUMBER: 0317.020600

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PARAMEDIC

12.0 DEMONSTRATE KNOWLEDGE OF THE PARAMEDIC PROFESSION--The student will be able to:

12.01 Define the role and responsibilities of the paramedic.
12.02 Describe and contrast the differences between the various levels of training, from EMT to Paramedic.
12.03 List current state requirements for paramedic certification and recertification.
12.04 Discuss Chapter 401, Florida Statutes, and Chapter 10D-66, Florida Administrative Code.
12.05 State the major purposes of a national association, a national registry, and professional journals.
12.06 State the benefits of paramedics teaching in their community.
12.07 Define continuing education, certification, licensure and registration.

13.0 DESCRIBE EMS SYSTEMS--The student will be able to:

13.01 Define and describe Medical Control and physician responsibility.
13.02 Discuss pre-hospital stabilization of patients.
13.03 Discuss the general differences between management of trauma and medical patients.
13.04 Define and discuss protocols and their development.
13.05 Describe the relationship between prehospital care and total patient care including the emergency department, and hospital specialty departments.
13.06 Describe the continuum of patient care and the responsibilities of the paramedic within the transfer of patient responsibility.
13.07 Discuss the development, implementation, and control of an EMS system.
13.08 Discuss response of the EMS system including system access, dispatcher responsibilities, patient evaluation, medical command, and patient responsibility.
13.09 Discuss promulgation of national standards such as KKK ambulance standards, and involvement of groups such as ASTM, NCSEMSTC, American College of Surgeons, American Medical

Association Joint Review Committee, and the U.S. Dpeartment of Transportation.

13.10 Discuss the various paramedic-physician relationships.

13.11 Describe retrospective evaluation of patient care including run report review, continuing education, skill practice, and skill deterioration.

13.12 Discuss the EMT-P's initial responsibilities when arriving on the scene.

14.0 DESCRIBE MEDICAL/LEGAL CONSIDERATIONS--The student will be able to:

14.01 Discuss the scope and significance of current national and Florida laws and administrative rules relating to the paramedic.

14.02 Discuss medical-legal concepts relating to the paramedic.

14.03 Discuss the need for accurate medical documentation and recordkeeping.

14.04 Discuss the extent to which force and restraint may be used to protect the patient, the Paramedic, and third parties.

14.05 Identify those circumstances that require the Paramedic to report incidents to law enforcement and/or other appropriate authorities.

15.0 DESCRIBE AND DEMONSTRATE EMS COMMUNICATIONS SYSTEMS--The student will be able to:

15.01 Describe the phases of communication necessary to complete a typical EMS event.

15.02 Define and describe essential communication terms and equipment.

15.03 Describe various EMS communication systems and the advantages and disadvantages of each.

15.04 Describe factors affecting interference, range and clarity of base, vehicle and portable radio communications.

15.05 Describe the functions and responsibilities of the F.C.C.

15.06 Describe the functions and responsibilities of the EMS dispatcher.

15.07 Describe purposes and methods of verbal communication of patient information to the hospital and to the physician.

15.08 Organize a patient presentation in the proper order for radio transmission to the physician.

15.09 Describe the importance of written medical protocols and the written EMS run report.

15.10 Demonstrate the proper use of portable and mobile transmitter/receivers in a real or simulated patient situation.

15.11 Discuss uses of biotelemetry equipment.

15.12 Complete a written EMS report based on a real or simulated patient situation.

16.0 DEMONSTRATE RESCUE TECHNIQUES AND EXTRICATION--The student will be able to:

16.01 Identify possible hazards when given a description of a scene and describe the procedures for handling the hazards.

16.02 Identify and/or describe the equipment used and the techniques necessary for gaining access to, packaging, extricating and transporting patients trapped within a vehicle or other confinement.

16.03 Describe the integration of patient care into the process of patient disentanglement and rescue.

16.04 Identify proper response in the presence of hazardous materials and name proper hazardous materials authorities that should be notified.

16.05 Manage scene and safe patient access.

16.06 Discuss removal and transport of the patient from the scene.

16.07 Demonstrate the procedures and operation of equipment used for gaining access to, packaging, extricating, and transporting patients trapped or confined in a vehicle or other type of entrapment.

16.08 Demonstrate techniques for lifting and handling patients with and without spine injuries and/or other special injury problems utilizing the specialized equipment found on a rescue vehicle.

17.0 DESCRIBE MAJOR INCIDENT RESPONSE--The student will be able to:

17.01 Define mass casualty incident (MCI) and when it should be declared.

17.02 Describe the "pre-planning phase" and "response planning".

17.03 Discuss MCI communications.

17.04 Describe the components of special resources.

17.05 Describe the function of "scene command", "scene triage", and the "transferring command function".

17.06 Describe section and staging management and a system for patient identification.

17.07 Discuss on-scene medical control.

18.0 DESCRIBE AND MANAGE CAUSES OF STRESS--The student will be able to:

18.01 Define stress and discuss its causes and phases.

18.02 Describe common physiologic responses to stress, its effects, and typical defense mechanisms.

18.03 Describe factors that determine whether anxiety is a positive or negative response.

18.04 Describe behavior that is a manifestation of stress in patients, patients' families and the paramedic.

18.05 Identify and describe common causes of job-related stress and various techniques of paramedic stress management.

18.06 Describe the stages of the grief process and common needs of the patient, the family and the paramedic in dealing with death and dying.

18.07 Describe common management techniques used by the paramedic when a patient is dead or dying.

18.08 Discuss areas of controversy in prehospital care involving death and dying.

19.0 USE MEDICAL TERMS SPECIFIC TO EMS--The student will be able to:

19.01 Read, write, use, and respond correctly to terms specific to EMS.

19.02 Read, write, use, and respond correctly to abbreviations specific to EMS.

20.0 DEMONSTRATE GENERAL PATIENT ASSESSMENT AND INITIAL MANAGEMENT--The student will be able to:

20.01 Establish priorities of care based on threat to life and describe the treatment modalities for the management of these conditions.

20.02 Describe the primary and secondary survey.

20.03 Describe the anatomy, physiology and pathophysiology of the airway and lungs and its anatomical structures.

20.04 Describe the use of adjuncts in airway management.

20.05 Describe advanced methods of airway management.

20.06 Explain the significance of protection of the cervical spine in airway management.

20.07 Explain pulmonary ventilation and gas exchange across the alveolarcapillary membrane.

20.08 Describe the pathophysiology of open and closed pulmonary injuries.

20.09 Discuss the techniques for evaluating effectiveness of ventilation.

20.10 Describe the anatomy and physiology of the heart and the cardiovascular system.

20.11 Describe the pathophysiology of cardiac arrest.

20.12 Describe the mechanisms of evaluating the effectivensss of perfusion.

20.13 Describe hemorrhage control and its benefits and complications.

20.14 Assess neurological status.

20.15 Discuss the pathophysiology of shock.

20.16 Define the trauma score and its usefulness.

20.17 Demonstrate obtaining a relevant patient medical history.

20.18 Describe how a patient is packaged and stabilized for transportation to the hospital.

20.19 Discuss procedures for hospital selection, the transportation phase, and patient monitoring enroute to the hospital.

20.20 Perform a rapid assessment.

20.21 Perform a secondary survey.

20.22 Demonstrate cardiopulmonary resuscitation.

21.0 MANAGE AIRWAY AND VENTILATION--The student will be able to:

21.01 Describe and discuss techniques of advanced airway management, to include intubation and surgical procedures.

21.02 Demonstrate methods of airway management on adult, child, and intact manikins both manually and with adjunctive equipment.

21.03 Demonstrate methods for assessing continued adequacy of airway management and ventilation when using advanced airway devices.

21.04 Demonstrate use of portable and fixed suction devices for oropharyngeal and tracheal suctioning.

22.0 ASSESS AND MANAGE SHOCK--The student will be able to:

22.01 Identify and describe the causes, pathophysiology signs, symptoms, clinical manifestations, and management of shock.
22.02 Describe fluids, fluid transport, and fluid and electrolyte imbalances.
22.03 Discuss resuscitation of the shock patient.
22.04 Discuss the hemodynamics of the cardiovascular system.
22.05 Discuss differences in IV fluid composition and their implications in fluid administration.
22.06 Describe baroreceptors and their affect on blood pressure and perfusion.
22.07 Describe compensated and uncompensated shock.
22.08 Discuss evaluation of the patient's perfusion status.
22.09 Define and discuss acid-base balance.
22.10 Describe indications and contraindications of the pneumatic anti-shock garment.
22.11 Discuss the methods of fluid replacement and the advantages and disadvantages of each.
22.12 Demonstrate, in order of priority, the steps in shock resuscitation.
22.13 Demonstrate the use of the pneumatic anti-shock garment.
22.14 Demonstrate proper technique of setting up intravenous fluids for administration.
22.15 Demonstrate proper technique of peripheral and external jugular venous cannulation on the adult, child and infant patient.
22.16 Demonstrate proper techniques for trouble-shooting an intravenous infusion.
22.17 Calculate fluid administration rates for intravenous fluids utilizing a variety of administration sets.

23.0 DEMONSTRATE KNOWLEDGE OF PHARMACOLOGY AND ADMINISTER MEDICATIONS--The student will be able to:

23.01 Discuss the various origins and forms of drugs.
23.02 Discuss the various names of a drug (ie. generic, trade, official, chemical).
23.03 Identify those agencies responsible for regulating drugs and the rationale for regulation.
23.04 Demonstrate use of the Physicians Desk Reference.
23.05 Identify local and systemic effects of drugs.
23.06 List and evaluate effects of various factors on the action of drugs.
23.07 Discuss the methods of drug absorption.
23.08 Define and use relevant pharmacology terms.
23.09 Describe and discuss the apothecary and metric systems and convert between and within the systems.
23.10 Describe the various types of drugs and routes of administration.
23.11 Calculate fractional drug dosages.
23.12 State the advantages and disadvantages of subcutaneous, intramuscular, intravenous, and transtracheal injections.
23.13 Demonstrate the proper procedure for intramuscular, subcutaneous, intravenous piggyback, intravenous bolus, and transtracheal medication administration.

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23.14 Demonstrate the proper procedure for withdrawing medication from a glass vial and a glass ampule.

24.0 ASSESS AND MANAGE TRAUMA EMERGENCIES--The student will be able to:

24.01 Describe the general care and transportation of the trauma patient.
24.02 Describe the priorities of trauma care and triage with multiple patients.
24.03 Describe the anatomy, physiology, pathophysiology assessment, and management of trauma to all regions of the human body.
24.04 Describe and demonstrate methods of hemorrhage control.
24.05 Describe neurological examination, assessment, pathophysiology, and management.
24.06 Describe rapid on-scene management of the trauma patient.
24.07 Describe the components of a complete prehospital history and the significance of each.
24.08 Describe various types of splints that are used for immobilization of fractures and dislocations, their use and the advantages and disadvantages of each.
24.09 Describe the short and long backboard, the various state-of-the-art substitutes available, and their specific uses.
24.10 Describe various systems designed for scoring the severity of injuries of the trauma patient.
24.11 Identify and describe the use of a trauma score in quantifying patient condition.
24.12 Demonstrate advanced methods of airway management and ventilation in the trauma patient.
24.13 Demonstrate decompression of a tension pneumothorax.
24.14 Demonstrate application of pneumatic anti-shock garment (MAST).
24.15 Describe and demonstrate physical examination of the trauma patient.
24.16 Demonstrate a neurological examination as performed on the trauma patient.
24.17 Demonstrate immobilization of the cervical spine.
24.18 Demonstrate splinting techniques.

25.0 ASSESS AND MANAGE BURN INJURIES--The student will be able to:

25.01 Describe the anatomy, physiology, pathophysiology, and assessment of the integumentary system.
25.02 Discuss the movement of body fluids between plasma, interstitial compartments and intracellular compartments.
25.03 Describe the assessment and management of the burn victim.
25.04 Describe the pathophysiology and treatment of burn shock.
25.05 Describe and discuss the major causes, classifications, and categories of burn.
25.06 Describe and discuss the method of calculating percentages of body surface area burned and various formulas for calculating fluid resuscitation.
25.07 Describe the assessment and management of inhalation injury.
25.08 Demonstrate management of the burn victim with and without associated injuries.

26.0 ASSESS AND MANAGE RESPIRATORY EMERGENCIES--The student will be able to:

26.01 Describe the anatomy and physiology of the respiratory system and define appropriate medical terms.
26.02 Identify the normal partial pressures of oxygen and carbon dioxide in the alveoli, arterial and venous blood, and factors that affect those levels.
26.03 Describe the normal and COPD respiratory drives.
26.04 Identify the pharmacology, actions, indications, precautions, dosages, contraindications, and side effects of typical respiratory drugs for the adult and pediatric patient and demonstrate methods of administration.
26.05 Discuss the signs, symptoms, and pathophysiology of conditions affecting the respiratory system.
26.06 Demonstrate inspection, auscultation and palpation of the thorax.
26.07 Identify normal and abnormal lung sounds.
26.08 Obtain a history and assess patients with respiratory complaints.
26.09 Describe the management of patients with respiratory problems.

27.0 ASSESS AND MANAGE CARDIOVASCULAR EMERGENCIES--The student will be able to:

27.01 Describe the anatomy, physiology, and pathophysiology relevant to cardiovascular disease and emergencies.
27.02 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of common emergency cardiovascular drugs (AHA/ACLS).
27.03 Identify complications of intracardiac injections.
27.04 Describe innervation of the heart, sympathetic and parasympathetic stimulation, blockade, and effects on the heart rate.
27.05 Discuss myocardial electrical physiology.
27.06 Describe signs, symptoms, and common chief complaints of patients with cardiac conditions.
27.07 Identify and describe the historical information, specific observations, and physical findings to be evaluated in the cardiac patient.
27.08 Identify actions, uses, and side effects of common prescription drugs relative to cardiac problems.
27.09 Discuss the etiology of cardiac arrest in adults and pediatric patients.
27.10 Discuss concepts of ECG monitoring, types and causes of artifacts, and rhythm analysis format.
27.11 Identify the wave forms, intervals, and normal values relative to an electrocardiogram (ECG).
27.12 Describe a 12-lead ECG and compare to continuous monitoring.
27.13 Describe the etiology, clinical significance, and ECG characteristics of cardiac dysrhythmias.
27.14 Describe the indications for use of a precordial thump, vago tonic maneuvers, synchronized cardioversion, and defibrillation and discuss energy recommendations for adult and pediatric patients.

27.15 Identify wave forms, artifacts, and dysrhythmias on Lead or MC11 rhythm strips and oscilloscope.
27.16 Obtain history, assess, and manage dysrhythmias or cardiac condtion.
27.17 Demonstrate application of ECG electrodes and obtain a sample Lead II or MC11 rhythm strip.
27.18 Use defibrillator paddles for Lead II monitoring.
27.19 Troubleshoot a poor ECG rhythm.
27.20 Perform a precordial thump, vago tonic maneuvers, synchronized cardioversio, defibrillation, and external cardiac pacing.
27.21 Use a mechanical CPR device.

28.0 ASSESS AND MANAGE ENDOCRINE EMERGENCIES--The student will be able to:

28.01 Identify and describe the anatomy, physiology, pathophysiology of the endocrine system.
28.02 Describe the assessment and management of endocrine emergencies.
28.03 Identify and discuss the significance of the historical information, observations, and physical findings in the patient with endocrine disorders.
28.04 Identify common prescription drugs that a patient with endocrine problems might take and the implications of each.
28.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
28.06 Obtain a history and assess and manage patients with endocrine problems.
28.07 Administer relevant drugs.

29.0 ASSESS AND MANAGE NEUROLOGICAL EMERGENCIES--The student will be able to:

29.01 Identify and describe the anatomy, physiology, pathophysiology of the neurological system.
29.02 Describe the assessment and management of neurological disorders.
29.03 Identify the actions, uses and side effects of common prescription drugs relative to neurological problems.
29.04 Identify common prescription drugs that a patient with neurological problems might take and the implications of each.
29.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
29.06 Describe and use the Glasgow Coma Scale.
29.07 Describe and differentiate various types of seizures and their phases.
29.08 Obtain history and assess patients with neurological disorders.
29.09 Manage patients with neurological emergencies.

30.0 ASSESS AND MANAGE DIGESTIVE, GENITOURINARY, AND REPRODUCTIVE EMERGENCIES--The student will be able to:

30.01 Describe the anatomy, physiology, pathophysiology of the digestive, genitourinary and reproductive systems.

30.02 Identify and describe the significance of the historical information, observations, and physical findings in the patient with digetive, genitourinary, and reproductive disorders.
30.03 Describe the assessment and treatment of digestive, genitourinary, and reproductive system disorders.
30.04 Identify common prescription drugs that a patient with digestive, genitourinary, and reproductive problems might take and the implications of each.
30.05 Discuss the basic principles, types, and complications of dialysis.
30.06 Discuss the assessment and management of the dialysis patient, to include vascular access.
30.07 Obtain a history and assess patients with digestive, genitourinary, and reproductive problems.
30.08 Manage patients with digestive, genitourinary, and reproductive emergencies.

31.0 ASSESS AND MANAGE ANAPHYLAXIS EMERGENCIES--The student will be able to:

31.01 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of anaphylaxis.
31.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with potential anaphylaxis.
31.03 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects for the adult and pediatric patient for epinephrine, diphenhydramine, aminophylline, and dexamethasone.
31.04 Obtain a history and assess patients with potential anaphylaxis.
31.05 Manage patients with anaphylactic emergencies.
31.06 Administer epinephrine, diphenhydramine, aminophylline, and dexamethasone to the adult and pediatric patient.

32.0 ASSESS AND MANAGE TOXICOLOGY, ALCOHOLISM, AND DRUG ABUSE EMERGENCIES--The student will be able to:

32.01 Discuss toxicologic emergencies.
32.02 Identify and discuss the routes of entry of toxic substances into the body.
32.03 Discuss the role of Poison Control Centers in the EMS system and in the management of patients with toxicological emergencies.
32.04 Define abuse terms, identify commonly abused drugs, and describe their effects.
32.05 Describe the anatomy, physiology, pathophysiology assessment and management of patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.
32.06 Discuss the incidence of alcoholism, drug abuse, and substance abuse in the United States.
32.07 obtain a history, assess, and manage patients with toxicological emergencies, animal or insect bites, stings, drug overdose, and alcoholism.
32.08 Administer relevant drugs.

32.09 Apply a constricting band.

33.0 ASSESS AND MANAGE INFECTIOUS DISEASES--The student will be able to:

33.01 Define terms and conditions relative to infectious diseases.
33.02 Describe the anatomy, physiology, pathophysiology, causes, mode of transmission, incubation period, assessment and management typical infectious and communicable diseases and parasites.
33.03 Identify and discuss the significance of historical information, observations, and physical findings in the patient with infectious/communicable disease or parasites.
33.04 Practice Universal Precautions according to Center for Disease Control Guidelines (CDC).
33.05 Discuss procedures for reporting and follow-up after exposure to a communicable disease, according to established standards.
33.06 Describe methods used to disinfect equipment and vehicles involved with an infectious patient.
33.07 Obtain a history and assess patients with infectious/communicable disease or parasites.
33.08 Manage patients with infectious/communicable disease or parasites.

34.0 ASSESS AND MANAGE ENVIRONMENTAL INJURIES--The student will be able to:

34.01 Describe and discuss homeostasis, methods of body temperature regulation and the role and methods of thermoregulation and heat dissipation and retention in pathologic circumstances.
34.02 Identify and discuss the significance of historical information, observations, and physical findings in the patient with hypothermic or hyperthermic disorders.
34.03 Describe the anatomy, physiology, pathophysiology, causes, signs and symptoms, assessment and management of hypothermic or hyperthermic disorders.
34.04 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of near-drowning.
34.05 Identify and discuss the significance of historical information, observations, and physical findings in the patient with a near-drowning emergency.
34.06 State the factors affecting survivability and probability of successful resuscitation in near-drowning patients.
34.07 Identify the common types and sources of ionizing radiation.
34.08 Identify sources of normal background radiation.
34.09 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of acute and/or chronic exposure to ionizing radiation.
34.10 Identify and discuss the significance of historical information, observations, and physical findings in the patient with acute and/or chronic exposure to ionizing radiation.
34.11 Discuss the safety of allied health personnel and patients related to exposure to ionizing radiation.
34.12 Discuss procedures relating to radiological incidents for notification of appropriate health officials.
34.13 List the common medical problems associated with scuba diving accidents.

34.14 Describe the anatomy, physiology, pathophysiology, signs and symptoms, assessment and management of decompression sickness, overpressure accidents, pneumomediastinum, air embolism, nitrogen narcosis, and subcutaneous emphysema.

34.15 Identify and discuss the significance of historical information, observations, and physical findings in patients with decompression sickness, overpressure accidents, pneumomediastimum, air embolism, nitrogen narcosis, and subcutaneous emphysema, and the significance of each.

34.16 Obtain a history and assess patients with hypothermic and hyperthermic problems.

34.17 Discuss management of patients with hypothermic and hyperthermic complaints.

34.18 Obtain a history and assess patients with exposure to ionizing radiation.

34.19 Discuss management of patients with exposure to ionizing radiation.

34.20 Obtain a history and assess patients with near-drowning emergencies.

34.21 Discuss management of patients with near-drowning emergencies.

34.22 Obtain a history and assess patients with scuba diving emergencies.

34.23 Discuss management of patients with scuba diving emergencies.

35.0 ASSESS AND MANAGE GERIATRIC EMERGENCIES--The student will be able to:

35.01 Identify the physical, social and psychological differences between youth and the elderly.

35.02 Identify and discuss the significance of historical information, observations, and physical findings in the geriatric patient with acute and/or chronic medical problems.

35.03 Identify and discuss illness/complaints that require special consideration in the elderly.

35.04 Describe the anatomy, physiology, pathophysiology, assessment and management of common geriatric illnesses.

35.05 Obtain a history and assess geriatric patients.

35.06 Treat geriatric patients.

35.07 Discuss geriatric abuse.

35.08 Discuss the components and objectives of a gerontology program.

36.0 ASSESS AND MANAGE PEDIATRIC EMERGENCIES--The student will be able to:

36.01 Identify the general goals of management of the pediatric patient.

36.02 Discuss specific historical information and its sources in evaluating the pediatric patient.

36.03 Discuss by age groups the relevant aspects of normal growth and development, personality development, relatiohship to parents, history factors, common illnesses and accidents.

36.04 Describe Sudden Infant Death Syndrome (SIDS), current theories, assessment and management, and the immediate needs of the family.

36.05 Describe the characteristics of the child abuser and the abused child.

36.06 Discuss the assessment and management of the potentially abused child including important historical information and management of the family in the child abuse situation.

36.07 Describe the anatomy, physiology, pathophysiology, assessment, and management of common pediatric disorders.

36.08 Identify the pediatric dosage for relevant drugs (AHA/ACLS).

36.09 Discuss and demonstrate techniques for airway maintenance in the pediatric patient.

36.10 Describe and discuss techniques and sites for intravenous infusion in the pediatric patient.

36.11 Obtain history and assess the pediatric patient.

37.0 ASSESS AND MANAGE THE GYNECOLOGIC PATIENT--The student will be able to:

37.01 Describe the anatomy and physiology of the female reproductive system.

37.02 Identify and disucss the significance of historical information, observations, and physical findings to be evaluated in the patient's gynecologic problems.

37.03 Describe the pathophysiology and management of gynecological disorders.

37.04 Describe potential causes, assessment and management of trauma to the external genitalia.

37.05 Describe the assessment and management of a sexual assault victim.

37.06 Obtain a history and assess and manage the patient with a gynecologic problem.

38.0 ASSESS AND MANAGE THE OBSTETRIC PATIENT--The student will be able to:

38.01 Define obstetrical terminology.

38.02 Describe the process of fetal development and circulation.

38.03 Identify and discuss the significance of historical information, observations, and physical findings in the obstetric patient.

38.04 Identify and describe early signs and symptoms of pregnancy.

38.05 Describe potential causes, assessment, and management of trauma to the pregnant mother and the fetus.

38.06 Discuss the effects of pregnancy on pre-existing medical conditions.

38.07 Describe the anatomy, physiology, pathophysiology, causes, assessment and management of obstetric.

38.08 Describe Braxton-Hicks contractions.

38.09 Discuss the progression of labor.

38.10 Discuss factors that influence transport decisions for the patient in labor.

38.11 Describe a normal cephalic delivery.

38.12 Discuss the pathophysiology, assessment, and management ofdeliverycomplications.

38.13 Identify the pharmacology, actions, indications, methods of administration, dosages, contraindications and side effects of oxytocin.

38.14 Obtain a history and assess the obstetric patient.

38.15 Treat obstetrical patients, including assisting with childbirth.
38.16 Administer oxytocin.

39.0 ASSESS AND MANAGE THE NEONATE--The student will be able to:

39.01 Describe anatomy, physiology, pathophysiology, assessment, and routine management of the neonate.
39.02 Describe the mechanisms and effects, and treatment of hypothermia in the neonate.
39.03 Define the parameters, numerical values utilized, and the procedure for Apgar scoring.
39.04 Describe and demonstrate stimulation of and CPR for the distressed neonate.
39.05 Identify observations and physical findings to be evaluated in the neonate.
39.06 Identify the problems and equipment requirements for transportation of the neonate.
39.07 Obtain a history, assess, and manage the neonate.
39.08 Administer oxygen to the neonate.
39.09 Suction the neonate using DeLee Suction and bulb syringe.
39.10 Calculate Apgar score.

40.0 ASSESS AND MANAGE BEHAVIORAL EMERGENCIES--The student will be able to:

40.01 Define behavioral emergency.
40.02 Discuss factors that may alter the emotional status of the ill or injured.
40.03 Discuss reasons and method of reassuring the patient experiencing and emotional crisis.
40.04 Discuss verbal communication techniques usful in managing the emotionally disturbed patient.
40.05 Discuss means to insure the safety of the Paramedic.
40.06 Discuss circumstances when bystanders and relatives should be removed from the scene.
40.07 Discuss factors which increase the risk of suicide and behaviors that are indicators of an impending suicide attempt.
40.08 Discuss the techniques that facilitate the systematic gathering and reporting of information about the disturbed patient.
40.09 Discuss techniques that are useful in managing the effects of crisis situations on the Paramedic.
40.10 Discuss techniques that are useful in redirecting anxiety in relatives and bystanders.
40.11 Discuss appropriate action of the Paramedic when confronted with an uncontrollable, armed patient.
40.12 Discuss those situations in which the Paramedic may forcibly restrain or transport a patient.
40.13 Discuss and demonstrate techniques for restraining the violent patient.
40.14 Discuss and demonstrate techniques useful in protecting the Paramedic when attached by a violent patient.
40.15 Obtain a history, assess, and manage patients with behavioral emergencies.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Patient Care Assistant 95-96
Occupational Area:	Health Science Education
Components:	3 completion points, & 1 Option
	PSAV
Program Number:	H170693
CIP Number:	0317.069904
Grade Level	30, 31
Length	285-365 hours
Certification:	REG NURSE G PRAC NURSE @7 @G NURSING ED @5
Facility Code:	253
Basic Skills:	
Math	7
Language	8
Reading	8

I. **PURPOSE:** The Patient Care Assistant program is designed to prepare advanced Nursing Assistants, Health Care Technicians, Patient Care Assistants, or Patient Care Technician, Nursing Aides and Orderlies (66008445), or Home Health Aides (66011462) students for employment as health care technicians or patient care assistants, or to provide supplemental training for persons previously or currently employed in any of these occupations. This program offers a broad foundation of knowledge and skills, expanding the traditional role of the nursing assistant. Upon completion, the graduate will be prepared to care for patients in hospitals, nursing homes, home health agencies or private homes.

II. **PROGRAM STRUCTURE:** This program is a planned sequence of instruction consisting of the Health Careers Core and one or more occupational completion points. The core is required as a prerequisite for all health programs and options. Secondary or postsecondary students who have previously completed the Health Careers Core will not have to repeat the core. A student who completes the applicable competencies at any occupational completion point may either continue with the training program or exit as an occupational completer.

Specific course information regarding licensure and certification guidelines is included with the student performance standards portion of the framework. The recommended length for the core is 90 clock hours.

The program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643, F.S.

The Patient Care Assistant 95-96 modules in this program are:

Health Careers Core (75-90 clock hours)
Nursing Assistant (75 clock hours and an occupatonal completion point)
Home Health Aide A (20-50 clock hours and an occupational completion point)
Patient Care Assistant (75 clock hours and an occupational completion point)

OR THE OPTION Home Health Aide B

Home Health Aide B (40-75 clock hours and an occupational completion point)

Additional cross-training modules in Electrocardiograph Aide, Phlebotomy, and Health Unit Coordinator are encouraged.

Successful completion of the occupational completion point of Nursing Assistant qualifies the student to take the state certification examination for Nursing Assistant if the program has been approved. To be approved, the course must be taught by a Registered Nurse and be at least 120 hours in length including the core. Such certification is required for employment in a nursing home, in accordance with Chapter 82-163, Florida Statutes. Nursing Assistants do not need to be certified except to work in nursing homes unless it is a condition for employment in other institutions. For nursing assistant certification, a minimum of 40 hours clinical and/or cooperative education learning experiences must be obtained. Twenty hours of this clinical experience must be in a licensed nursing home. This program also meets the requirements of Home Health Aide as stated in Rules of the Department of Health and Rehabilitative services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies.

To be considered a Patient Care Assistant, program completers must achieve four modules available in this program:

Health Careers Core (75-90 clock hours)
Nursing Assistant (75 clock hours)
Home Health Aide A (20-50 clock hours)
Patient Care Assistant (75 clock hours)

Beginning with the 1995-96 school year, students who completed the secondary course 8417210 Nursing Assistant 95-96 and the core at the secondary level, only need to complete two modules to become Patient Care Assistants:

Home Health Aide A (20-50 clock hours)
Patient Care Assistant (75 clock hours)

Students enrolling in this program only for the occupational completion point of Nursing Assistant need to complete two modules whose total clock hours cannot be less than 120:

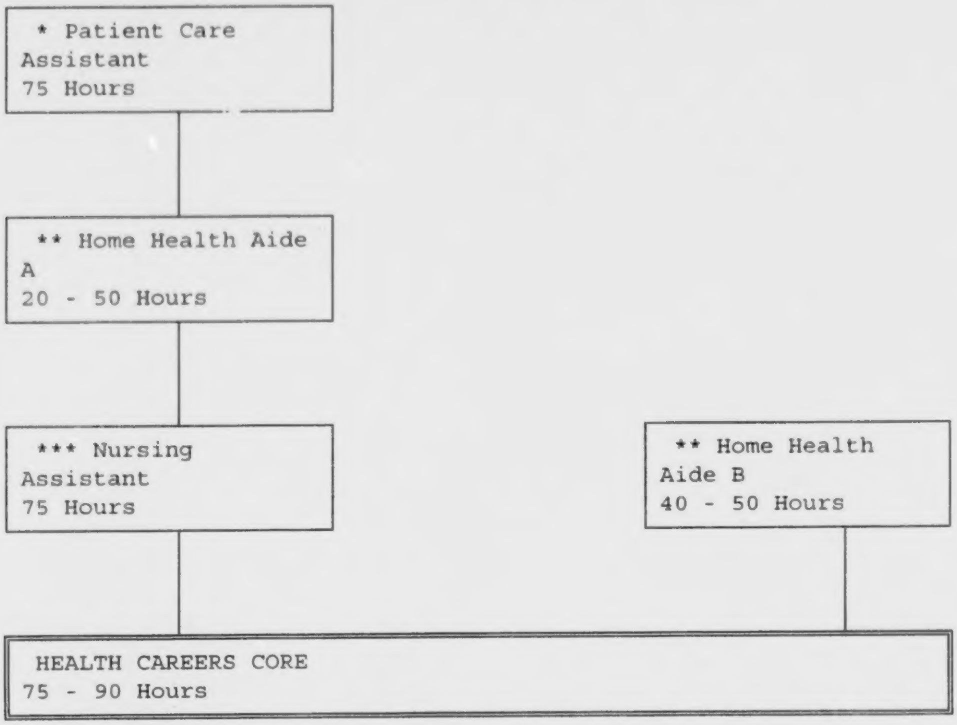
Health Careers Core (75-90 clock hours)
Nursing Assistant (75 clock hours)

Students enrolling only for the occupational completion point of Home Health Aide who have NOT previously completed Nursing Assistant must complete two modules:

Health Careers Core (75-90 clock hours)
Home Health Aide B (40-75 clock hours)

Students enrolling for the occupational completion point of Home Health Aide who have previously completed Nursing Assistant must complete one module, Home Health Aide A. This module for the average achieving student is 50 clock hours but not less than 20.

THE FOLLOWING DIAGRAM ILLUSTRATES THE CLUSTER STRUCTURE


* Patient Care Assistant 75 Hours
** Home Health Aide A 20 - 50 Hours
*** Nursing Assistant 75 Hours
** Home Health Aide B 40 - 50 Hours
HEALTH CAREERS CORE 75 - 90 Hours

* Occupational Completion Point C

** Occupational Completion Point B

*** Occupational Completion Point A

III. **LABORATORY ACTIVITIES**: Students will perform nursing skills in a clinical setting for approximately one-half of the program, under the supervision of a qualified registered nurse instructor. The recommended teacher/student ratio in the clinical area is 1:12. Clinical learning experiences must correlate with didactic instructional and laboratory experiences.

IV. **SPECIAL NOTES**: Health Occupations Students of America, Inc. (HOSA) is the appropriate vocational student organization for providing leadership training and for reinforcing specific vocaitonal skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

This program must be taught by a Registered Nurse meeting the qualifications as set forth in 6A-6.080(9) and 10D-68.014(2) F.A.C. Students who have completed the Health Careers Core may articulate to this program.

The cooperative method of instruction may be appropriate for the programs in this cluster with restrictions. Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the teacher, and the employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupations which the student has chosen as a career goal. The student must receive compensation for work performed. **PERSONS WHO ARE ENROLLED IN A STATE APPROVED NURSING ASSISTANT TRAINING PROGRAM, APPROVED BY THE DEPARTMENT OF EDUCATION, MAY BE EMPLOYED BY A LICENSED NURSING HOME FOR A PERIOD OF FOUR MONTHS. THE CERTIFICATION REQUIREMENTS MUST BE MET WITHIN SUCH INITIAL EMPLOYMENT, HOWEVER.**

In accordance with Rule 6A-10.040 FAC, the minimum basic-skills grade levels required for this postsecondary adult vocational program when offered for 450 hours or more are Mathematics 7.0, Language 8.0, and Reading 8.0. These grade-level numbers correspond to grade-equivalent scores obtained on state-designated basic-skills examinations.

Completion of this program should enable the postsecondary student to be given advanced standing in the Practical Nursing program H170605.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for the programs in this cluster and is printed in a supplement to this document.

INTENDED OUTCOMES FOR HEALTH CAREERS CORE MODULE:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

INTENDED OUTCOMES for Nursing Assistant Module: (12-23)

OCCUPATIONAL COMPLETION POINT - DATA CODE A
NURSING AIDES AND ORDERLIES - OES 66008445

Intended outcomes 01-11 must be completed previously or concurrently with this module. After completing this module, the student will have achieved the occupational completion point of Nursing Assistant and will be able to:

12.0 Use verbal and written communications specific to nurse assisting.

13.0 Demonstrate legal and ethical responsibilities specific to nurse assisting.
14.0 Perform physical comfort and safety functions specific to nurse assisting.
15.0 Provide personal patient care.
16.0 Perform nursing procedures.
17.0 Apply principles of nutrition.
18.0 Provide care for geriatric patients.
19.0 Apply the principles of infection control specific to nursing assisting.
20.0 Provide biologial, psychological, and social support.
21.0 Perform supervised management functions, following the patient plan of care.
22.0 Assist with restorative (rehabilitative) activities.

INTENDED OUTCOMES for Home Health Aide A Module: (23-28)
OCCUPATIONAL COMPLETION POINT - DATA CODE B
HOME HEALTH AIDE - OES 66011462

Intended outcomes 01-11 must be completed previously or concurrently with this module. Students in this module have already completed a Nursing Assistant program. After completing this module, the student will have achieved the occupational completion point of Home Health Aide and the student will be able to:

23.0 Use verbal and written communications specific to home health aide.
24.0 Demonstrate legal and ethical responsibilities specific to home health aide.
25.0 Perform physical comfort and safety functions specific to home health aide.
26.0 Apply principles of nutrition specific to home health aide.
27.0 Apply the principles of infection control specific to home health aide.
28.0 Perform home health-care services.

INTENDED OUTCOMES for Patient Care Assistant Module:
OCCUPATIONAL COMPLETION POINT - DATA CODE C
PATIENT CARE ASSISTANT - Industry Title

Intended outcomes 01-11 must be completed previously or concurrently with this module. Students enrolled in this module have previosly completed a Nursing Assistant program and are adding these skills to work in a health care facility other than a nursing home. An occupational completion point can only be achieved when this module is completed plus the modules/credentials for Home Health Aide and Nursing Assistant. After completing this module, the student will be able to:

29.0 Perform skills related to the hospital setting.
30.0 Provide care for the adult patient.
31.0 Demonstrate knowledge and understanding for needs of patients with specific health problems.

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INTENDED OUTCOMES for Home Health Aide B Module:

OCCUPATIONAL COMPLETION POINT - DATA CODE B
HOME HEALTH AIDE - OES 66011462

Intended outcomes 01-11 must be completed previously or concurrently with this module. Students enrolled in this module will achieve the occupational completion point of Home Health Aide and the student will be able to:

32.0 Use verbal and written communications.
33.0 Demonstrate legal and ethical responsibilities.
34.0 Perform physical comfort and safety functions.
35.0 Provide personal patient care.
36.0 Perform nursing procedures.
37.0 Apply principles of nutrition.
38.0 Provide care for geriatric patients.
39.0 Apply the principles of infection control.
40.0 Provide bio-psycho-social support
41.0 Perform supervised management functions, following the patient plan of care.
42.0 Assist with rehabilitative activities.
43.0 Perform home health-care services.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Patient Care Assistant 95-96
POSTECONDARY NUMBER: H170693

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.

06.03 Obtain and maintain BLS for Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

OCCUPATIONAL COMPLETION POINT - DATA CODE A
NURSING AIDES and ORDERLIES - OES Code 66008445

MODULE: Nursing Assistant

The following intended outcomes 12-22 should be taught together as a module to achieve the occupational completion point of Nursing Assistant. The average achieving student should be able to complete the module in 75 clock hours. The entire Nursing Assistant program including the core, is 150 hours for the average achieving student but cannot be less than 120 hours.

Successful completion of the occupational completion point of Nursing Assistant qualifies the student to take the state certification examination for Nursing Assistant if the program has been approved. To be approved the program must be taught by a registered nurse and must have 40 hours of clinical, twenty of which are in a licensed nursing home, and be at least 120 hours in length. Such certification is required for employment in a nursing home, in accordance with Chapter 82-163, Florida Statutes.

Students completing this module will be able to:

12.0 USE VERBAL AND WRITTEN COMMUNICATIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

12.01 Obtain specified data from patient and family.
12.02 Utilize verbal and written information to assist with the patient's plan of care.
12.03 Demonstrate use of the intercom.

13.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO NURSE ASSISTING--The student will be able to:

13.01 Demonstrate legal and ethical behavior within the role and scope of nursing assistant responsibilities.
13.02 Describe the purpose of the chain of command (i.e.,to resolve patient or employee problems).
13.03 Follow policies and procedures affecting the health, safety, and well-being of patients.
13.04 Recognize and report signs of substance abuse.
13.05 Follow legal guidelines in charting.
13.06 Exhibit behavior supporting and promoting residents' rights.

14.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

14.01 Maintain patient units and equipment.
14.02 Maintain service areas on the units including supplies and equipment.
14.03 Observe, report, and note changes in the patient's behavior daily, including mental awareness.
14.04 Adjust bed and siderails.
14.05 Lift, hold, and transfer patients including the use of the mechanical lift utilizing good body mechancis.
14.06 Turn and position patient.
14.07 Apply protective devices as directed (e.g., vest and belt).
14.08 Apply comfort devices as directed (e.g., footboard, overbed cradle, alternating pressure mattress).
14.09 Assist patient to dangle.
14.10 Assist patient in ambulation, including the use of crutch, cane, or walker.
14.11 Assist patient in using wheelchair.
14.12 Assist patient with care and use of prosthetic/orthotic devices.
14.13 Administer back rub.
14.14 Describe emergency procedures utilized in the clinical area(s).

15.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

15.01 Give bed bath.
15.02 Assist with shower or tub bath, including the use of specialty tubs.
15.03 Assist patient with sink, tub, shower, or bed shampoo.
15.04 Shave patient.
15.05 Groom patient, including hair, skin, foot, and nail care.
15.06 Assist with and/or administer oral hygiene.
15.07 Assist patient with toileting.
15.08 Assist patient to dress.
15.09 Assist patient with meals.
15.10 Provide bowel and bladder training.
15.11 Give perineal care.

16.0 PERFORM NURSING PROCEDURES--The student will be able to:

16.01 Admit patient.
16.02 Transfer patient.
16.03 Discharge patient.
16.04 Make unoccupied/occupied bed.
16.08 Measure and record patient's height and weight.
16.09 Assist patient in passive range-of-motion exercises.
16.10 Apply anti-embolic hose.
16.11 Collect, strain, and/or test routine urine specimen.
16.12 Collect timed urine specimen.
16.13 Monitor catheter drainage system.
16.14 Collect clean-catch (midstream-voided) urine specimen.
16.15 Monitor fluid intake and output (I&O).
16.16 Observe, record, and report patient's emesis.
16.17 Assist patient with sitz bath.
16.18 Monitor and assist with care of catheters.
16.19 Assist with ostomy care.
16.20 Collect stool specimen.
16.21 Perform postmortem care.
16.22 Maintain patient-belongings list.
16.23 Administer prepackaged enema of five ounces or less.

17.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

17.01 Identify nutrients and food groups.
17.02 Explain regional, cultural, and religious food preferences.
17.03 Describe special diets.
17.04 Prepare a basic food plan.
17.05 Check patient's diet tray for accuracy.
17.06 Identify methods of maintaining fluid balance.

18.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

18.01 Identify safety principles as related to the elderly.
18.02 Describe general characteristics, particular needs, and problems of the elderly.
18.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
18.04 Distinguish between fact and fallacy about the aging process.
18.05 Identify community resources and services available to the elderly.
18.06 Apply Reality Orientation Techniques and Validation Therapy.
18.07 Provide and involve patients in diversional activities.
18.08 Identify common alterations in elderly patient behavior.
18.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

19.0 APPLY THE PRINCIPLES OF INFECTION CONTROL SPECIFIC TO NURSE ASSISTING--The student will be able to:

19.01 Provide care for patients with infectious diseases applying the principles of "Universal Precautions" utilized with all patients as well as special procedures required.
19.02 Set up isolation unit.
19.03 Follow isolation procedure with food tray, garments, and other materials.
19.04 Collect specimen from patient in isolation.

20.0 PROVIDE BIOLOGIAL, PSYCHOLOCIAL, AND SOCIAL SUPPORT--The student will be able to:

20.01 Discuss family roles and their significance to health.
20.02 Respond to patient and family emotional needs.

21.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

21.01 Organize patient-care assignments.
21.02 Complete assignments accurately and in a timely manner.

22.0 ASSIST WITH RESTORATIVE (REHABILITATIVE) ACTIVITIES--The student will be able to:

22.01 List the purposes of restorative (rehabilitation) programs.
22.02 Assist patients with specified restorative (rehabilitation) needs.
22.03 Assist patients/residents to reach the optimum level of independence.

OCCUPATIONAL COMPLETION POINT - DATA CODE B
HOME HEALTH AIDE - OES Code 66011462

MODULE: Home Health Aide A

Students in this module have already completed a Nursing Assistant program. After completing this module, the student will have achieved the occupational completion point of Home Health Aide. This program also meets the requirements of Home Health Aide as stated in Rules of the Department of Health and Rehabilitative services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies.

The recommended length of instruction for this module is 50 clock hours but no less than 20. Beginning 1995-96, secondary students who have completed the course 8417210 Nursing Assistant should take this module to become a home health aide. Students completing the following intended outcomes (23-28) and the student performance standards will be able to:

23.0 USE VERBAL AND WRITTEN COMMUNICATIONS SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

23.01 Obtain specified data from patient and family.

23.02 Utilize verbal and written information to assist with the patient's plan of care.

24.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

24.01 Demonstrate legal and ethical behavior within the role and scope of home health aide responsibilities.
24.02 Follow policies and procedures affecting the health, safety, and well-being of patients in the home setting.

25.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

25.01 Maintain patient units in the home.
25.02 Identify emergency evacuation procedures with adaptations to the home setting.

26.0 APPLY PRINCIPLES OF NUTRITION SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

26.01 List factors that must be considered when purchasing food.
26.02 List factors that must be considered when storing food.
26.03 Discuss preparation and serving of trays in the home.

27.0 APPLY THE PRINCIPLES OF INFECTION CONTROL SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

27.01 Provide care for patients with infectious diseases in the home.
27.02 Follow isolation procedures with food tray, garments, and other materials in the home.
27.03 Utilize universal precautions in all home care.

28.0 PERFORM HOME HEALTH-CARE SERVICES--The student will be able to:

28.01 Follow an established work plan with the patient and family.
28.02 Perform patient-related cleaning tasks and laundry.
28.03 Identify methods for medication storage.
28.04 Assist patient with taking self-administered prescribed medication in the home.
28.05 Demonstrate how to improvise specified equipment and supplies in the home.

OCCUPATIONAL COMPLETION POINT - DATA CODE C
PATIENT CARE ASSISTANT - Industry Title

MODULE: PATIENT CARE ASSISTANT

Students enrolled in this module have previosly completed a Nursing Assistant and Home Health Aide program and are adding these skills to work in a health care facility other than a nursing home. The average achieving student should complete this module in 75 clock hours. The occupational completion point Patient Care Assistant can only be achieved when this module is completed plus the modules/or credentials for Home Health Aide and Nursing Assistant are satisfied.

After completing intended outcomes 41-43 and the student performance standards, the student will be able to:

29.0 PERFORM SKILLS RELATED TO THE HOSPITAL SETTING--The student will be able to:

- 29.01 Care for hospital equipment and supplies.
- 29.02 Transfer patient to stretcher.
- 29.03 Prepare hot and cold applications and assist nurse to apply them.
- 29.04 Assist patient to apply binders.
- 29.05 Care for patient in skin and skeletal traction.
- 29.06 Assist with pre-operative and post-operative patient care.
- 29.07 Reinforce dressings.
- 29.08 Practice nursing procedures from the nursing assistant module in the hospital setting.

30.0 PROVIDE CARE FOR THE ADULT PATIENT--The student will be able to:

- 30.01 Insert a rectal tube.
- 30.02 Assist with physical examination.
- 30.03 Care for patients receiving oxygen therapy.
- 30.04 Change an unsterile dressing.
- 30.05 Take an apical pulse.
- 30.06 Take an apical-radial pulse.
- 30.07 Take pedal pulse.
- 30.08 Give cast care.
- 30.09 Give artificial eye/contact lense care.

31.0 DEMONSTRATE KNOWLEDGE AND UNDERSTANDING FOR NEEDS OF PATIENT WITH SPECIFIC HEALTH PROBLEMS--The student will be able to:

- 31.01 Assist a patient having a seizure.
- 31.02 Assist patients with spinal cord injuries.
- 31.03 Assist patients with arthritis.
- 31.04 Assist patients with diabetes.
- 31.05 Assist the blind patient with basic needs.
- 31.06 Assist patients with blood borne diseases.

OPTIONAL OCCUPATIONAL COMPLETION POINT - DATA CODE B

HOME HEALTH AIDE - OES 66011462

MODULE: HOME HEALTH AIDE B

Students in this module have NOT previously completed a Nursing Assistant program. After completing this module, the student will have achieved the occupational completion point of Home Health Aide. This program also meets the requirements of Home Health Aide as stated in Rules of the Department of Health and Rehabilitative services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies.

The recommended length of instruction for this module is 75 hours but not less than 50. Students completing the following intended outcomes (29-40) and the student performance standards will be able to:

32.0 USE VERBAL AND WRITTEN COMMUNICATIONS--The student will be able to:

- 32.01 Obtain specified data from patient and family.
- 32.02 Utilize verbal and written information to assist with the patient's plan of care.
- 32.03 Demonstrate use of the intercom.

33.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 33.01 Demonstrate legal and ethical behavior within the role and scope of home health aide responsibilities.
- 33.02 Follow policies and procedures affecting the health, safety, and well-being of patients in the home setting.
- 33.03 Recognize and report signs of substance abuse.
- 33.04 Follow legal guidelines in charting.
- 33.05 Exhibit behavior supporting and promoting residents' rights.

34.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS--The student will be able to:

- 34.01 Maintain patient units in the home.
- 34.02 Adjust bed and siderails.
- 34.03 Transfer patient, using mechanical lifters.
- 34.04 Turn and position patient.
- 34.05 Apply protective devices as directed (e.g. vest or belt).
- 34.06 Apply comfort devices as directed (e.g. footboard, overbed cradle, alternating pressure mattress).
- 34.07 Assist patient to dangle.
- 34.08 Assist patient in ambulation, including the use of crutch, cane, or walker.
- 34.09 Assist patient in using wheelchair.
- 34.10 Assist patient with care and use of prosthetic/orthotic devices.
- 34.11 Administer back rub.
- 34.12 Identify emergency evacuation procedures with adaptations to the home setting.

35.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

- 35.01 Give bed bath.

35.02 Assist with shower or tub bath, including use of specialty tubs.
35.03 Assist patient with sink, tub, shower, or bed shampoo.
35.04 Shave patient.
35.05 Groom patient, including hair, skin, foot, and nail care.
35.06 Assist with and/or administer oral hygiene.
35.07 Assist patient with toileting.
35.08 Assist patient to dress.
35.09 Assist patient with meals.

36.0 PERFORM NURSING PROCEDURES--The student will be able to:

36.01 Make unoccupied/occupied bed.
36.02 Assist patient in passive range-of-motion exercises.
36.03 Apply anti-embolic hose.
36.04 Collect, strain, and/or test routine urine specimen.
36.05 Monitor catheter drainage system.
36.06 Monitor fluid intake and output (I&O) including forcing and restricting fluids.
36.07 Observe, record, and report patient's emesis.
36.08 Assist patient with sitz bath.
36.09 Assist with ostomy care.
36.10 Collect stool specimen.
36.11 Care for patients receiving oxygen therapy.

37.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

37.01 Identify nutrients and food groups.
37.02 Explain regional, cultural, and religious food preferences.
37.03 Describe special diets.
37.04 List factors that must be considered when purchasing food.
37.05 Prepare a basic food plan.
37.06 List factors that must be considered when storing food.
37.07 Identify methods of maintaining fluid balance.
37.08 Identify methods of food preparation.
37.09 Discuss preparation and serving of trays in the home.

38.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

38.01 Identify safety principles, as related to the elderly.
38.02 Describe general characteristics, particular needs, and problems of the elderly.
38.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
38.04 Distinguish between fact and fallacy about the aging process.
38.05 Identify community resources and services available to the elderly.
38.06 Apply Reality Orientation Techniques and Validation Therapy.
38.07 Provide and involve patients in diversional activities.
38.08 Identify common alterations in elderly patient behavior.

38.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

39.0 APPLY THE PRINCIPLES OF INFECTION CONTROL--The student will be able to:

39.01 Provide care for patients with infectious diseases in the home.
39.02 Follow isolation procedures with food tray, garments, and other materials in the home.
39.03 Utilize universal precautions in all home care.

40.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT--The student will be able to:

40.01 Discuss family roles and their significance to health.
40.02 Respond to patient and family emotional needs.

41.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

41.01 Organize patient-care assignments.
41.02 Complete assignments accurately and in a timely manner.

42.0 ASSIST WITH REHABILITATIVE ACTIVITIES--The student will be able to:

42.01 List the purposes of restorative (rehabilitation) programs.
42.02 Assist patient with specified restorative (rehabilitation) needs.
42.03 Assist patients/residents to reach the optimum level of independence.
43.0 PERFORM HOME HEALTH-CARE SERVICES--The student will be able to:

43.01 Follow an established work plan with the patient and family.
43.02 Perform patient-related cleaning tasks and laundry.
43.03 Identify methods for medication storage.
43.04 Assist patient with taking self-administered prescribed medication in the home.
43.05 Demonstrate how to improvise specified equipment and supplies in the home.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Patient Care Technician
Program Type:	Job Preparatory
Occupational Area:	Health Science Education
Components:	7 Completion Points and 1 Option.
	PSAV
Program Number	**H170694**
CIP Number	0317.069905
Grade Level	30,31
Length	600 hours
Certification:	See individual module
VSO	HOSA
Coop Method	Yes with restrictions
Apprenticeship	No
Facility Code:	253
Basic Skills	
Math	9
Language	9
Reading	9

I. **PURPOSE**: This program is designed to prepare students for employment as advanced Nursing Assistants, Health Care Technicians, Patient Care Assistants, Nursing Aides and Orderlies (66008439), Home Health Aides (66011456), Phlebotomists, Electrocardiograph Aides, Allied Health Assistants or Patient Care Technicians and to provide supplemental training for persons previously or currently employed in any of these occupations. This program offers a broad foundation of knowledge and skills, expanding the traditional role of the nursing assistant.

The program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **PROGRAM STRUCTURE**: This program is a planned sequence of instruction consisting of the Health Careers Core and seven occupational completion points. The Health Careers Core is required for all health programs and options. Secondary or postsecondary students who have previously completed the Health Careers Core will not have to repeat the core. A student who completes the applicable competencies at any occupational completion point may either continue with the training program or exit as an occupational completer.

Specific course information regarding licensure and certification guidelines is included with the student performance standards portion of the framework. The recommended length for the core is 90 clock hours.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643, F.S.

The related modules available in this program are:

Health Careers Core
Nursing Assistant
Home Health Aide A
Patient Care Assistant
Phlebotomy
Electrocardiograph Aide
Allied Health Assistant
Patient Care Technician

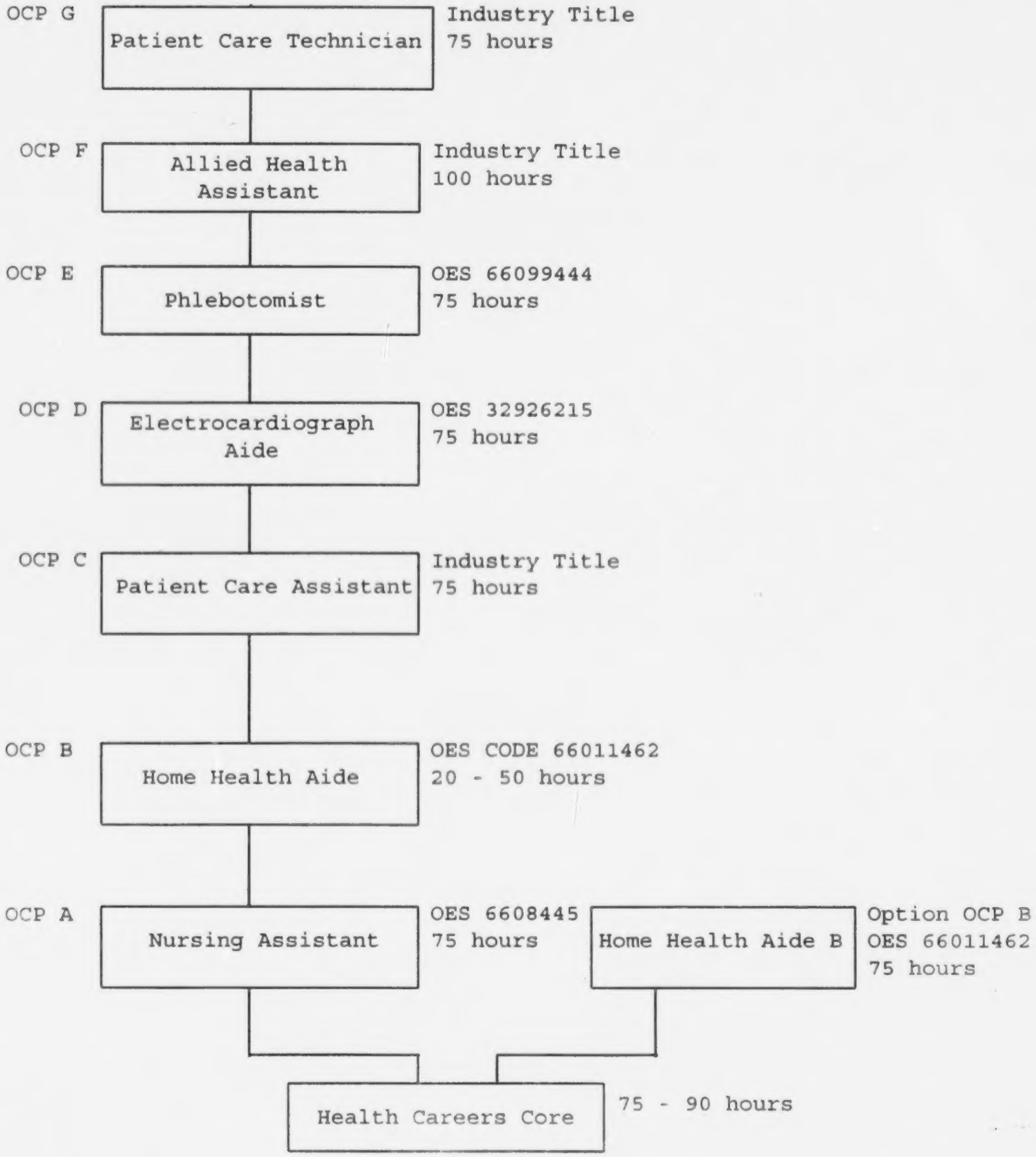
Home Health Aide Option: This option is available for students seeking to exit as a Home Health Aide only and who have NOT previously completed Nursing Assistant. The two modules available for this option are:

Health Careers Core
Home Health Aide B

To complete at Patient Care Assistant, the module core, Nursing Assistant and Home Health Aide plus the Patient Care Assistant module must be completed.

To Complete at Patient Care Technician the module Core, Nursing Assistant, Home Health Aide, Patient Care Assistant, Electrocardiograph Aide, Phlebotomy, Allied Health Assistant, and the last module of Patient Care Technician must be completed. The length of the entire program for the average achieving student is 600 hours.

The folowing diagram illustrates the cluster structure


OCP G
Patient Care Technician
Industry Title
75 hours
OCP F
Allied Health Assistant
Industry Title
100 hours
OCP E
Phlebotomist
OES 66099444
75 hours
OCP D
Electrocardiograph Aide
OES 32926215
75 hours
OCP C
Patient Care Assistant
Industry Title
75 hours
OCP B
Home Health Aide
OES CODE 66011462
20 - 50 hours
OCP A
Nursing Assistant
OES 6608445
75 hours
Home Health Aide B
Option OCP B
OES 66011462
75 hours
Health Careers Core
75 - 90 hours

COURSE	TEACHER CERTIFICATION AREAS									
	ANYHEALTH OCC G	PRAC NURSE @7@G	REG NURSE G	PARAMEDIC @7G	NURSING ED @5	MED ASST @7G	EKG @7G	LAB ASST @7G	LAB TECH @7G	TEC MED !7!G
CORE	X									
Allied Health Assistant	X									
Phlebotomy		X	X	X	X	X	X	X	X	X
Patient Care Assistant		X	X		X					
EKG Aide		X	X	X	X	X	X	X	X	X
Home Health Aide 3		X	X		X					
Nursing Assistant		X	X		X					
Patient Care Technician		X	X		X					

III. **LABORATORY ACTIVITIES:** Students will perform nursing skills in a clinical setting for approximately one-half of the program, under the supervision of a qualified registered nurse instructor. The recommended teacher/student ratio in the clinical area is 1:12. Clinical learning experiences must correlate with didactic instructional and laboratory experiences.

IV. **SPECIAL NOTES:** Health Occupations Students of America, Inc. (HOSA) is the appropriate vocational student organization for providing leadership training and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, FAC.

This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

This module up to and including Patient Care Assistant must be taught by a Registered Nurse meeting the qualifications as set forth in 6A-6.080(9) and 10D-68.014(2) F.A.C. Students who have completed the Health Careers Core may articulate to this program. For teacher certification requirements for the remaining modules please check the certification diagram and/or the individual module.

The cooperative method of instruction is appropriate for this program. (Please note restriction.) Whenever the cooperative method is offered, the following is required for each student: a training plan signed by the student, the teacher, and the employer, which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills and tasks which are relevant to the occupations which the student has chosen as a career goal. The student must receive compensation for work performed. **STUDENTS ENROLLED IN A STATE APPROVED NURSING ASSISTANT PROGRAM, APPROVED BY THE DEPARTMENT OF EDUCATION, MAY BE EMPLOYED AS A NURSING ASSISTANT FOR A PERIOD OF 4 MONTHS. THEY MUST, HOWEVER RECEIVE THEIR CERTIFICATION WITHIN THE 4 MONTHS.**

In accordance with Rule 6A-10.040 FAC, the minimum basic-skills grade levels required for this postsecondary adult vocational program are Mathematics 9.0, Language 9.0, and Reading 9.0. These grade-level numbers correspond to grade-equivalent scores obtained on state-designated basic-skills examinations.

Completion of this program should enable the postsecondary student to be given advanced standing in the Practical Nursing program H170605.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this program.

INTENDED OUTCOMES FOR HEALTH CAREERS CORE MODULE:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the core in another program. However, outcomes 01-11 must be completed before the additional modules in this program. After completing the module, the student will be able to:

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDES.
11.0 Apply basic math and science skills.

INTENDED OUTCOMES FOR NURSING ASSISTANT MODULE:

OCCUPATIONAL COMPLETION POINT - DATA CODE A
NURSING AIDES AND ORDERLIES - OES 66008445

Intended outcomes 01-11 must be completed previously or concurrently with this module. After completing this module, the student will have achieved the occupational completion point of Nursing Assistant and will be able to:

12.0 Use verbal and written communications specific to nurse assisting.
13.0 Demonstrate legal and ethical responsibilities specific to nurse assisting.

14.0 Perform physical comfort and safety functions specific to nurse assisting.
15.0 Provide personal patient care.
16.0 Perform nursing procedures.
17.0 Apply principles of nutrition.
18.0 Provide care for geriatric patients.
19.0 Apply the principles of infection control specific to nursing assisting.
20.0 Provide biological, psychological, and social support.
21.0 Perform supervised management functions, following the patient plan of care.
22.0 Assist with restorative (rehabilitative) activities.

INTENDED OUTCOMES FOR HOME HEALTH AIDE A MODULE:

OCCUPATIONAL COMPLETION POINT - DATA CODE B
HOME HEALTH AIDE - OES 66011462

Intended outcomes 01-11 must be completed previously or concurrently with this module. Students in this module have already completed a Nursing Assistant program. After completing this module, the student will have achieved the occupational completion point of Home Health Aide and the student will be able to:

23.0 Use verbal and written communications specific to home health aide.
24.0 Demonstrate legal and ethical responsibilities specific to home health aide.
25.0 Perform physical comfort and safety functions specific to home health aide.
26.0 Apply principles of nutrition specific to home health aide.
27.0 Apply the principles of infection control specific to home health aide.
28.0 Perform home health-care services.

INTENDED OUTCOMES FOR PATIENT CARE ASSISTANT MODULE:

OCCUPATIONAL COMPLETION POINT - DATA CODE C
PATIENT CARE ASSISTANT - Industry Title

Intended outcomes 01-11 must be completed previously or concurrently with this module. Students enrolled in this module have previously completed a Nursing Assistant program and are adding these skills to work in a health care facility other than a nursing home. An occupational completion point can only be achieved when this module is completed plus the modules/credentials for Home Health Aide and Nursing Assistant. After completing this module, the student will be able to:

29.0 Perform skills related to the hospital setting.
30.0 Provide care for the adult patient.
31.0 Demonstrate knowledge and understanding for needs of patients with specific health problems.

INTENDED OUTCOMES FOR HOME HEALTH AIDE B MODULE:

OCCUPATIONAL COMPLETION POINT - DATA CODE B
HOME HEALTH AIDE - OES 66011462

Intended outcomes 01-11 must be completed previously or concurrently with this module. Students enrolled in this module will achieve the occupational completion point of Home Health Aide and the student will be able to:

32.0 Use verbal and written communications.
33.0 Demonstrate legal and ethical responsibilities.
34.0 Perform physical comfort and safety functions.
35.0 Provide personal patient care.
36.0 Perform nursing procedures.
37.0 Apply principles of nutrition.
38.0 Provide care for geriatric patients.
39.0 Apply the principles of infection control.
40.0 Provide bio-psycho-social support
41.0 Perform supervised management functions, following the patient plan of care.
42.0 Assist with rehabilitative activities.
43.0 Perform home health-care services

INTENDED OUTCOMES FOR ELECTROCARDIOGRAPH AIDE MODULE:

OCCUPATIONAL COMPLETION POINT- DATA CODE D- OES CODE
ELECTROCARDIOGRAPH AIDE - OES CODE 32926215

Intended outcomes 01-11 must be completed previously or concurrently with this module. After completing this module, the student will have achieved the occupational completion point of electrocardiograph aide and will be able to:

44.0 Describe the cardiovascular system.
45.0 Describe cardiovascular drugs, their actions, use and adverse effects.
46.0 Describe and demonstrate cardiac wellness and rehabilitation.
47.0 Identify legal and ethical responsibilities.
48.0 Demonstrate knowledge of, apply and use medical instrumentation modalities.
49.0 Perform patient care techniques in the health care facility.

INTENDED OUTCOMES FOR PHLEBOTOMY:

OCCUPATIONAL COMPLETION POINT- DATA CODE E- OES CODE
PHLEBOTOMIST 66099444

Intended outcomes 01-11 must be completed previously or concurrently with this module. After completing this module, the student will have achieved the occupational completion point of Phlebotomist and will be able to:

50.0 Demonstrate accepted professional, communication and interpersonal skills.
51.0 Discuss phlebotomy in relation to the health care setting.

52.0 Identify the anatomic structure and function of body systems in relation to services performed by phlebotomist.
53.0 Recognize and identify collection reagents, supplies, equipment and interfering chemical substances.
54.0 Demonstrate skills and knowledge necessary to perform phlebotomy.
55.0 Practice infection control following universal precautions.
56.0 Practice accepted procedures of transporting, accessioning and processing specimens.
57.0 Practice quality assurance and safety.

INTENDED OUTCOMES FOR ALLIED HEALTH ASSISTANT:

OCCUPATIONAL COMPLETION POINT- DATA CODE F
ALLIED HEALTH ASSISTANT- INDUSTRY TITLE

Intended outcomes 01-11 must be completed previously or concurrently with this module. After completing this module, the student will have achieved the occupational completion point of Allied Health Assistant and will be able to:

58.0 Perform skills representative of 1-3 major allied health areas as determined by local labor market demand (Such skills must be at aide level and not be beyond the scope of unlicensed assistive personnel).
59.0 Successfully complete a clinical rotation in the selected major allied health areas.

INTENDED OUTCOME FOR PATIENT CARE TECHNICIAN:

OCCUPATIONAL COMPLETION POINT- DATA CODE G
PATIENT CARE TECHNICIAN-INDUSTRY TITLE

Intended outcomes 01-11 must be completed previously or concurrently with this module. After completing all competencies 01-61.0, the student will have achieved the occupational completion point of Patient Care Technician and will be able to:

60.0 Develop organizational and management skills.
61.0 Practice organizational and management skills in a clinical setting.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Patient Care Technician
Postsecondary Number: H170694

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

OCCUPATIONAL COMPLETION POINT - DATA CODE A
NURSING AIDES and ORDERLIES - OES Code 66008445

MODULE: NURSING ASSISTANT

The following intended outcomes 12-22 should be taught together as a module to achieve the occupational completion point of Nursing Assistant. The average achieving student should be able to complete the module in 75 clock hours. The entire Nursing Assistant program including the core, is 150 hours for the average achieving student but cannot be less than 120 hours.

Successful completion of the occupational completion point of Nursing Assistant qualifies the student to take the state certification examination for Nursing Assistant if the program has been approved. To be approved the program must be taught by a registered nurse and must have 40 hours of clinical, twenty of which are in a licensed nursing home, and be at least 120 hours in length. Such certification is required for employment in a nursing home, in accordance with Chapter 82-163, Florida Statutes.

Students completing this module will be able to:

12.0 USE VERBAL AND WRITTEN COMMUNICATIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

12.01 Obtain specified data from patient and family.
12.02 Utilize verbal and written information to assist with the patient's plan of care.
12.03 Demonstrate use of the intercom.

13.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO NURSE ASSISTING--The student will be able to:

13.01 Demonstrate legal and ethical behavior within the role and scope of nursing assistant responsibilities.
13.02 Describe the purpose of the chain of command (i.e., to resolve patient or employee problems).

13.03 Follow policies and procedures affecting the health, safety, and well-being of patients.
13.04 Recognize and report signs of substance abuse.
13.05 Follow legal guidelines in charting.
13.06 Exhibit behavior supporting and promoting residents' rights.

14.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS SPECIFIC TO NURSE ASSISTING--The student will be able to:

14.01 Maintain patient units and equipment.
14.02 Maintain service areas on the units including supplies and equipment.
14.03 Observe, report, and note changes in the patient's behavior daily, including mental awareness.
14.04 Adjust bed and siderails.
14.05 Lift, hold, and transfer patients including the use of the mechanical lift utilizing good body mechanics.
14.06 Turn and position patient.
14.07 Apply protective devices as directed (e.g., vest and belt).
14.08 Apply comfort devices as directed (e.g., footboard, overbed cradle, alternating pressure mattress).
14.09 Assist patient to dangle.
14.10 Assist patient in ambulation, including the use of crutch, cane, or walker.
14.11 Assist patient in using wheelchair.
14.12 Assist patient with care and use of prosthetic/orthotic devices.
14.13 Administer back rub.
14.14 Describe emergency procedures utilized in the clinical area(s).

15.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

15.01 Give bed bath.
15.02 Assist with shower or tub bath, including the use of specialty tubs.
15.03 Assist patient with sink, tub, shower, or bed shampoo.
15.04 Shave patient.
15.05 Groom patient, including hair, skin, foot, and nail care.
15.06 Assist with and/or administer oral hygiene.
15.07 Assist patient with toileting.
15.08 Assist patient to dress.
15.09 Assist patient with meals.
15.10 Provide bowel and bladder training.
15.11 Give perineal care.

16.0 PERFORM NURSING PROCEDURES--The student will be able to:

16.01 Admit patient.
16.02 Transfer patient.
16.03 Discharge patient.
16.04 Make unoccupied/occupied bed.
16.08 Measure and record patient's height and weight.

16.09 Assist patient in passive range-of-motion exercises.
16.10 Apply anti-embolic hose.
16.11 Collect, strain, and/or test routine urine specimen.
16.12 Collect timed urine specimen.
16.13 Monitor catheter drainage system.
16.14 Collect clean-catch (midstream-voided) urine specimen.
16.15 Monitor fluid intake and output (I&O).
16.16 Observe, record, and report patient's emesis.
16.17 Assist patient with sitz bath.
16.18 Monitor and assist with care of catheters.
16.19 Assist with ostomy care.
16.20 Collect stool specimen.
16.21 Perform postmortem care.
16.22 Maintain patient-belongings list.
16.23 Administer prepackaged enema of five ounces or less.

17.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

17.01 Identify nutrients and food groups.
17.02 Explain regional, cultural, and religious food preferences.
17.03 Describe special diets.
17.04 Prepare a basic food plan.
17.05 Check patient's diet tray for accuracy.
17.06 Identify methods of maintaining fluid balance.

18.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

18.01 Identify safety principles as related to the elderly.
18.02 Describe general characteristics, particular needs, and problems of the elderly.
18.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
18.04 Distinguish between fact and fallacy about the aging process.
18.05 Identify community resources and services available to the elderly.
18.06 Apply Reality Orientation Techniques and Validation Therapy.
18.07 Provide and involve patients in diversional activities.
18.08 Identify common alterations in elderly patient behavior.
18.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

19.0 APPLY THE PRINCIPLES OF INFECTION CONTROL SPECIFIC TO NURSE ASSISTING--The student will be able to:

19.01 Provide care for patients with infectious diseases applying the principles of "Universal Precautions" utilized with all patients as well as special procedures required.
19.02 Set up isolation unit.
19.03 Follow isolation procedure with food tray, garments, and other materials.
19.04 Collect specimen from patient in isolation.

20.0 PROVIDE BIOLOGICAL, PSYCHOLOGICAL, AND SOCIAL SUPPORT--The student will be able to:

20.01 Discuss family roles and their significance to health.
20.02 Respond to patient and family emotional needs.

21.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

21.01 Organize patient-care assignments.
21.02 Complete assignments accurately and in a timely manner.

22.0 ASSIST WITH RESTORATIVE (REHABILITATIVE) ACTIVITIES--The student will be able to:

22.01 List the purposes of restorative (rehabilitation) programs.
22.02 Assist patients with specified restorative (rehabilitation) needs.
22.03 Assist patients/residents to reach the optimum level of independence.

OCCUPATIONAL COMPLETION POINT - DATA CODE B
HOME HEALTH AIDE - OES Code 66011462

MODULE: HOME HEALTH AIDE A

Students in this module have already completed a Nursing Assistant program. After completing this module, the student will have achieved the occupational completion point of Home Health Aide. This program also meets the requirements of Home Health Aide as stated in Rules of the Department of Health and Rehabilitative services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies.

The recommended length of instruction for this module is 50 clock hours but no less than 20. Beginning 1995-96, secondary students who have completed the course 8417210 Nursing Assistant should take this module to become a home health aide. Students completing the following intended outcomes (23-28) and the student performance standards will be able to:

23.0 USE VERBAL AND WRITTEN COMMUNICATIONS SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

23.01 Obtain specified data from patient and family.
23.02 Utilize verbal and written information to assist with the patient's plan of care.

24.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

24.01 Demonstrate legal and ethical behavior within the role and scope of home health aide responsibilities.

24.02 Follow policies and procedures affecting the health, safety, and well-being of patients in the home setting.

25.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

25.01 Maintain patient units in the home.
25.02 Identify emergency evaculation procedures with adaptations to the home setting.

26.0 APPLY PRINCIPLES OF NUTRITION SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

26.01 List factors that must be considered when purchasing food.
26.02 List factors that must be considered when storing food.
26.03 Discuss preparation and serving of trays in the home.

27.0 APPLY THE PRINCIPLES OF INFECTION CONTROL SPECIFIC TO HOME HEALTH AIDE--The student will be able to:

27.01 Provide care for patients with infectious diseases in the home.
27.02 Follow isolation procedures with food tray, garments, and other materials in the home.
27.03 Utilize universal precautions in all home care.

28.0 PERFORM HOME HEALTH-CARE SERVICES--The student will be able to:

28.01 Follow an established work plan with the patient and family.
28.02 Perform patient-related cleaning tasks and laundry.
28.03 Identify methods for medication storage.
28.04 Assist patient with taking self-administered prescribed medication in the home.
28.05 Demonstrate how to improvise specified equipment and supplies in the home.

OCCUPATIONAL COMPLETION POINT - DATA CODE C
PATIENT CARE ASSISTANT - Industry Title

MODULE: PATIENT CARE ASSISTANT

Students enrolled in this module have previously completed a Nursing Assistant and Home Health Aide program and are adding these skills to work in a health care facility other than a nursing home. The average achieving student should complete this module in 75 clock hours. The occupational completion point Patient Care Assistant can only be achieved when this module is completed plus the modules/or credentials for Home Health Aide and Nursing Assistant are satisfied.

After completing intended outcomes 41-43 and the student performance standards, the student will be able to:

29.0 PERFORM SKILLS RELATED TO THE HOSPITAL SETTING--The student will be able to:

29.01 Care for hospital equipment and supplies.
29.02 Transfer patient to stretcher.
29.03 Prepare hot and cold applications and assist nurse to apply them.
29.04 Assist patient to apply binders.
29.05 Care for patient in skin and skeletal traction.
29.06 Assist with pre-operative and post-operative patient care.
29.07 Reinforce dressings.
29.08 Practice nursing procedures from the nursing assistant module in the hospital setting.

30.0 PROVIDE CARE FOR THE ADULT PATIENT--The student will be able to:

30.01 Insert a rectal tube.
30.02 Assist with physical examination.
30.03 Care for patients receiving oxygen therapy.
30.04 Change an unsterile dressing.
30.05 Take an apical pulse.
30.06 Take an apical-radial pulse.
30.07 Take pedal pulse.
30.08 Give cast care.
30.09 Give artificial eye/contact lens care.

31.0 DEMONSTRATE KNOWLEDGE AND UNDERSTANDING FOR NEEDS OF PATIENT WITH SPECIFIC HEALTH PROBLEMS--The student will be able to:

31.01 Assist a patient having a seizure.
31.02 Assist patients with spinal cord injuries.
31.03 Assist patients with arthritis.
31.04 Assist patients with diabetes.
31.05 Assist the blind patient with basic needs.
31.06 Assist patients with blood borne diseases.

OPTIONAL OCCUPATIONAL COMPLETION POINT - DATA CODE B
HOME HEALTH AIDE - OES 66011462

MODULE: HOME HEALTH AIDE B

Students in this module have NOT previously completed a Nursing Assistant program. After completing this module, the student will have achieved the occupational completion point of Home Health Aide. This program also meets the requirements of Home Health Aide as stated in Rules of the Department of Health and Rehabilitative services, Division of Health, Chapter 10D-68 - Minimum Standards for Home Health Agencies.

The recommended length of instruction for this module is 75 hours but not less than 50. Students completing the following intended outcomes (29-40) and the student performance standards will be able to:

32.0 USE VERBAL AND WRITTEN COMMUNICATIONS--The student will be able to:

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32.01 Obtain specified data from patient and family.
32.02 Utilize verbal and written information to assist with the patient's plan of care.
32.03 Demonstrate use of the intercom.

33.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

33.01 Demonstrate legal and ethical behavior within the role and scope of home health aide responsibilities.
33.02 Follow policies and procedures affecting the health, safety, and well-being of patients in the home setting.
33.03 Recognize and report signs of substance abuse.
33.04 Follow legal guidelines in charting.
33.05 Exhibit behavior supporting and promoting residents' rights.

34.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS--The student will be able to:

34.01 Maintain patient units in the home.
34.02 Adjust bed and siderails.
34.03 Transfer patient, using mechanical lifters.
34.04 Turn and position patient.
34.05 Apply protective devices as directed (e.g. vest or belt).
34.06 Apply comfort devices as directed (e.g. footboard, overbed cradle, alternating pressure mattress).
34.07 Assist patient to dangle.
34.08 Assist patient in ambulation, including the use of crutch, cane, or walker.
34.09 Assist patient in using wheelchair.
34.10 Assist patient with care and use of prosthetic/orthotic devices.
34.11 Administer back rub.
34.12 Identify emergency evacuation procedures with adaptations to the home setting.

35.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

35.01 Give bed bath.
35.02 Assist with shower or tub bath, including use of specialty tubs.
35.03 Assist patient with sink, tub, shower, or bed shampoo.
35.04 Shave patient.
35.05 Groom patient, including hair, skin, foot, and nail care.
35.06 Assist with and/or administer oral hygiene.
35.07 Assist patient with toileting.
35.08 Assist patient to dress.
35.09 Assist patient with meals.

36.0 PERFORM NURSING PROCEDURES--The student will be able to:

36.01 Make unoccupied/occupied bed.

36.02 Assist patient in passive range-of-motion exercises.
36.03 Apply anti-embolic hose.
36.04 Collect, strain, and/or test routine urine specimen.
36.05 Monitor catheter drainage system.
36.06 Monitor fluid intake and output (I&O) including forcing and restricting fluids.
36.07 Observe, record, and report patient's emesis.
36.08 Assist patient with sitz bath.
36.09 Assist with ostomy care.
36.10 Collect stool specimen.
36.11 Care for patients receiving oxygen therapy.

37.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

37.01 Identify nutrients and food groups.
37.02 Explain regional, cultural, and religious food preferences.
37.03 Describe special diets.
37.04 List factors that must be considered when purchasing food.
37.05 Prepare a basic food plan.
37.06 List factors that must be considered when storing food.
37.07 Identify methods of maintaining fluid balance.
37.08 Identify methods of food preparation.
37.09 Discuss preparation and serving of trays in the home.

38.0 PROVIDE CARE FOR GERIATRIC PATIENTS--The student will be able to:

38.01 Identify safety principles, as related to the elderly.
38.02 Describe general characteristics, particular needs, and problems of the elderly.
38.03 Identify attitudes and living habits that promote positive mental and physical health for the elderly.
38.04 Distinguish between fact and fallacy about the aging process.
38.05 Identify community resources and services available to the elderly.
38.06 Apply Reality Orientation Techniques and Validation Therapy.
38.07 Provide and involve patients in diversional activities.
38.08 Identify common alterations in elderly patient behavior.
38.09 Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions).

39.0 APPLY THE PRINCIPLES OF INFECTION CONTROL--The student will be able to:

39.01 Provide care for patients with infectious diseases in the home.
39.02 Follow isolation procedures with food tray, garments, and other materials in the home.
39.03 Utilize universal precautions in all home care.

40.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT--The student will be able to:

40.01 Discuss family roles and their significance to health.
40.02 Respond to patient and family emotional needs.

41.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS, FOLLOWING THE PATIENT PLAN OF CARE--The student will be able to:

41.01 Organize patient-care assignments.
41.02 Complete assignments accurately and in a timely manner.

42.0 ASSIST WITH REHABILITATIVE ACTIVITIES--The student will be able to:

42.01 List the purposes of restorative (rehabilitation) programs.
42.02 Assist patient with specified restorative (rehabilitation) needs.
42.03 Assist patients/residents to reach the optimum level of independence.

43.0 PERFORM HOME HEALTH-CARE SERVICES--The student will be able to:

43.01 Follow an established work plan with the patient and family.
43.02 Perform patient-related cleaning tasks and laundry.
43.03 Identify methods for medication storage.
43.04 Assist patient with taking self-administered prescribed medication in the home.
43.05 Demonstrate how to improvise specified equipment and supplies in the home.

OCCUPATIONAL COMPLETION POINT - DATA CODE D
ELECTROCARDIOGRAPH AIDE-OES CODE 32926215

MODULE: ELECTROCARDIOGRAPH AIDE

Students enrolled in this module have completed the Patient Care Assistant competencies and are adding these skills to be further cross-trained to perform basic electrocardiograph patient care techniques.

Students completing the following intended outcomes (44.0-49.0) and the student performance standards will be able to:

44.0 DESCRIBE THE CARDIOVASCULAR SYSTEM--The student will be able to:

44.01 Locate the heart and surrounding structures.
44.02 Diagram and label the parts of the heart and list the functions of each labeled part.
44.03 Trace the flow of blood through the cardiopulmonary system.
44.04 Identify and describe the electrical conduction system.

45.0 DESCRIBE CARDIOVASCULAR DRUGS, THEIR ACTIONS, USE AND ADVERSE EFFECTS--The student will be able to:

45.01 Describe mechanisms by which cardiovascular drugs work.
45.02 List common cardiovascular drugs.

45.03 Identify and respond to cardiac emergency.
45.04 State actions and adverse effects of commonly used cardiovascular drugs.
45.05 Differentiate between normal and abnormal EKG changes due to drugs.

46.0 DESCRIBE AND DEMONSTRATE CARDIAC WELLNESS AND REHABILITATION--The student will be able to:

46.01 Identify predisposing factors to heart disease.
46.02 Describe the American Heart Association diet.
46.03 Explain behavior modification and stress management.
46.04 Describe principles of physical fitness and exercise.
46.05 Perform physical exercise and demonstrate physical fitness.

47.0 IDENTIFY LEGAL AND ETHICAL RESPONSIBILITIES OF AN EKG AIDE--The student will be able to:

47.01 Recognize and practice legal and ethical responsibilities as they relate to an EKG aide.
47.02 Maintain a safe and efficient work environment.
47.03 Maintain EKG equipment so it will be safe and accurate.

48.0 DEMONSTRATE KNOWLEDGE OF, APPLY AND USE MEDICAL INSTRUMENTATION MODALITIES--The student will be able to:

48.01 Calibrate and standardize the cardiograph instrument.
48.02 Identify three types of lead systems.
48.03 Demonstrate proper lead placement.
48.04 Identify artifacts and mechanical problems.
48.05 Perform and assess a 12 lead EKG.
48.06 Describe the Holter monitoring and scanning exercise treatment.
48.07 Describe other modalities of cardiovascular diagnosis and interpretation.
48.08 Use charting and documentation skills.
48.09 State Einthoven's triangle.

49.0 PERFORM PATIENT CARE TECHNIQUES IN THE HEALTH CARE FACILITY--The student will be able to:

49.01 Describe the physical and mental preparation of the patient for cardiovascular testing.
49.02 Identify patient and verify the requisition order.
49.03 Prepare patient for cardiovascular diagnostic testing.
49.04 Measure and record patient's vital signs and recognize and report abnormalities.
49.05 State precautions required when performing diagnostic procedures.

OCCUPATIONAL COMPLETION POINT - DATA CODE E
PHLEBOTOMIST - OES Code 66099444

MODULE: PHLEBOTOMY

Students enrolled in this module have completed the Patient Care Assistant competencies and are adding these skills to be further cross-trained to perform phlebotomy.

Students completing the following intended outcomes (50.0 - 57.0) and the student performance standards will be able to:

50.0 DEMONSTRATE ACCEPTED PROFESSIONAL, COMMUNICATION, AND INTERPERSONAL SKILLS--The student will be able to:

- 50.01 Demonstrate the appropriate professional behavior of a phlebotomist.
- 50.02 Explain to the patient the procedure to be used in specimen collection.
- 50.03 Follow approved procedure for labeling of specimens.
- 50.04 Explain in detail the importance of identifying patients correctly when drawing blood.

51.0 DISCUSS PHLEBOTOMY IN RELATION TO THE HEALTH CARE SETTING--The student will be able to:

- 51.01 List, classify and discuss various departments and services within the health care setting in which the phlebotomist must interact with to obtain laboratory specimens from patients.
- 51.02 Identify the major departments/sections with the clinical laboratory, the major types of procedures run in each department/section, and their specimen requirements.
- 51.03 Describe roles of the major classifications of clinical laboratory personnel (i.e., pathologist, chief/administrative technologist, CLS, MT, phlebotomist, etc.).

52.0 IDENTIFY THE ANATOMIC STRUCTURE AND FUNCTION OF BODY SYSTEMS IN RELATION TO SERVICES PERFORMED BY PHLEBOTOMIST--The student will be able to:

- 52.01 Describe and define major body systems with emphasis on the circulatory system.
- 52.02 List and describe the main superficial veins used in performing venipuncture.
- 52.03 Identify appropriate sites for capillary/venipuncture and name/find the most desirable one(s).
- 52.04 Describe the function of the following blood components: erythrocytes, thrombocytes, leukocytes, plasma, and serum.

53.0 RECOGNIZE AND IDENTIFY COLLECTION REAGENTS SUPPLIES, EQUIPMENT AND INTERFERING CHEMICAL SUBSTANCES--The student will be able to:

- 53.01 Identify and discuss proper use of appropriate types of equipment needed to collect various clinical laboratory blood specimens by venipuncture.
- 53.02 Explain the special precautions and types of equipment needed to collect blood from a neonate.

53.03 Identify and discuss proper use of supplies used in collecting microspecimens.
53.04 Identify and discuss the proper use of the various types of anticoagulants, preservatives and gels used in blood collection and the vacuum tube color-codes for these additives.
53.05 Describe the types of patient's specimens that are analyzed in the clinical laboratory and the phlebotomist's role in collecting and/or transporting these specimens to the laboratory.
53.06 Describe substances potentially encountered during phlebotomy which can interfere in analysis of blood constituents.
53.07 Define and utilize correct medical terminology and metric measurement needed for specimen collection.

54.0 DEMONSTRATE SKILLS AND KNOWLEDGE NECESSARY TO PERFORM PHLEBOTOMY--The student will be able to:

54.01 Recognize a properly completed requisition and apply established protocol for patient and specimen identification.
54.02 Discuss/perform methods for facilitating capillary/venipuncture collection.
54.03 Demonstrate knowledge of established protocol for patient and specimen identification.
54.04 List appropriate antiseptic agents useful in preparing sites for capillary/venipuncture.
54.05 Discuss/perform appropriate methods for preparing a site for capillary or venipuncture.
54.06 Perform venipuncture by evacuated tube and syringe systems, demonstrating appropriate use of supplies, proper handling of equipment and specimens, and appropriate patient care.
54.07 Describe the correct order of draw during capillary and venipuncture.
54.08 Perform a capillary puncture using appropriate supplies and techniques for adults, children and neonates.
54.09 Describe the most common complications associated with capillary and venipuncture, their causes, prevention and treatment.
54.10 Describe/perform capillary/venipuncture procedures for disposing of used or contaminated supplies.
54.11 Describe/perform appropriate techniques for making a peripheral blood smear for hematologic evaluation.

55.0 PRACTICE INFECTION CONTROL FOLLOWING UNIVERSAL PRECAUTIONS--The student will be able to:

55.01 Define the term "nosocomial infection."
55.02 Describe/practice procedures for infection prevention.
55.03 Discuss/perform isolation procedures.
55.04 Identify potential routes of infection.

56.0 PRACTICE ACCEPTED PROCEDURES OF TRANSPORTING, ACCESSIONING AND PROCESSING SPECIMENS--The student will be able to:

56.01 Describe routine procedures for transporting and processing specimens.
56.02 Describe the significance of time constraints for specimen collection and delivery.
56.03 Demonstrate knowledge of accessioning procedures.
56.04 Prepare aliquot(s) of specimen or component(s) for analysis according to specimen type and analysis to be performed.
56.05 Follow protocol for accepting verbal test orders.

57.0 PRACTICE QUALITY ASSURANCE AND SAFETY--The student will be able to:

57.01 Distinguish and perform procedures which ensure reliability of test results when collecting blood specimens.
57.02 Demonstrate knowledge of and practice appropriate patient safety.
57.03 Practice laboratory safety in accordance with established procedures.
57.04 Follow documentation procedures for work related accidents.

OCCUPATIONAL COMPLETION POINT - DATA CODE F
ALLIED HEALTH ASSISTANT - INDUSTRY TITLE

MODULE: ALLIED HEALTH ASSISTANT.

Students enrolled in this module have completed the Patient Care Assistant competencies and are adding these skills to be a further cross-trained worker. Students will perform skills representative of one to three areas of allied health care in the laboratory and clinical settings. Major areas of allied health are defined as physical therapy, emergency, radiation, laboratory and respiratory medicine, and occupational therapy. Other areas of health, medicine, dentistry, or veterinary may be included with instructor provided competencies. Such teacher made competencies must remain at the aide level and not go beyond the scope of practice of unlicensed assistive personnel. Invasive procedures that fall into the nursing scope of practice are not to be added. Clinical experience is defined as activities performed in the clinical setting under the supervision of a health professional duly certified/licensed in the selected occupational fields.

Students completing the following intended outcomes (58.0 - 59.0) and the student performance standards will be able to:

58.0 PERFORM SKILLS REPRESENTATIVE OF 1 TO 3 MAJOR ALLIED HEALTH AREAS IN THE SCHOOL LABORATORY BEFORE BEGINNING THE CLINICAL PHASE--The student will be able to:

58.01 Perform skills related to the body systems.
58.02 If clinical laboratory science is one of the selected allied health areas to be taught, students will:

58.02.01 Correctly pipette using automatic and manual pipette. Note: OSHA prohibits mouth pipetting!
58.02.02 Perform dip stick testing on blood and urine.
58.02.03 Type blood samples.
58.02.04 Prepare blood slides for differential blood count.
58.02.05 Stain blood slides.
58.02.06 Plate microbiological specimen on appropriate media.
58.02.07 Report urine specific gravity, color and characteristics.
58.02.08 Perform centrifuge operation and maintenance.
58.02.09 Focus a microscope and examine specimens using low, high-dry, and oil immersion lens.
58.02.10 Demonstrate knowledge of specimen differentiation and procedure interferences.
58.02.11 Perform communication skills specifically related to laboratory science.
58.02.12 Using an artificial arm, perform venipunctures.
58.02.13 Name and discuss the avenues of laboratory medicine practice.

58.03 If physical therapy is one of the selected allied health areas to be taught, students will:

58.03.01 Describe the functions of bones and muscles as related to the practice of physical therapy.
58.03.02 Define disability and identify types of disabilities.
58.03.03 Name and discuss the avenues of physical therapy practice.
58.03.04 Describe equipment used in physical therapy.
58.03.05 Teach crutch and walker use and care.
58.03.06 Perform safe body mechanics and transfer techniques.
58.03.07 Describe the use of modalities (i.e. Ultrasound)
58.03.09 Perform hydrotherapy.
58.03.10 Perform communication skills specifically related to physical therapy.
58.03.11 Assist clients to eat using prompting techniques.
58.03.12 Identify, describe, and demonstrate the use of adaptive feeding devices.
58.03.13 Identify augmented communication devices and describe the purpose of each.
58.03.14 Demonstrate techniques used in active and passive range of motion exercises.
58.03.15 Instruct patients in bed/wheelchair mobility activities.
58.03.16 Describe the relationship between long-term and short-term goals.

58.04 If occupational therapy is one of the selected allied health areas to be taught, students will:

58.04.01 Describe equipment used in occupational therapy.
58.04.02 Make splints.
58.04.03 Perform feeding and dressing skills using adaptive equipment.
58.04.04 Perform feeding and dressing skills using one hand.
58.04.05 Perform communication skills specifically related to occupational therapy.
58.04.06 Perform and instruct range and motion exercises.
58.04.07 Name and discuss the avenues of physical therapy practice.
58.04.08 Train the client in clothing care skills.
58.04.09 Train the client in food preparation skills.
58.04.10 Train the client in money management skills.

58.05 If respiratory therapy is one of the selected allied health areas to be taught, students will:

58.05.01 Name and discuss the avenues of Respiratory Care Practice.
58.05.02 Describe common respiratory diseases (asthma, emphysema, chronic bronchitis, atelectasis) and common medications used to treat respiratory diseases.
58.05.03 Recognize normal breath sounds when ausculating the chest with a stethoscope.
58.05.04 Assemble and practice using gas reducing and flow regulating equipment
58.05.05 Demonstrate and discuss the use of incentive spirometers.
58.05.06 Differentiate between various oxygen delivery devices (nasal cannulas, simple and rebreathing masks, oxyhoods, enclosures.
58.05.07 Stock shelves with, process, and perform preventative maintenance on respiratory care equipment.
58.05.08 Check emergency equipment assigned to respiratory care.
58.05.09 Demonstrate/discuss the use of postural drainage and percussion.
58.05.10 Discuss and practice the use of the pulse oxymeter.
58.05.11 Describe the equipment and use of humidity/aerosol.

58.06 If medical record keeping is one of the selected allied health areas to be taught, students will:

58.06.01 Demonstrate an understanding of basic medical terminology e.g. prefixes, suffixes and root words related to major body systems.
58.06.02 Demonstrate an understanding of straight numerical, alphabetical and terminal digit filing.

58.06.03 Demonstrate computer literacy, keyboarding and retrieval skills.

58.07 If Radiologic Technology is one of the selected allied health areas to be taught, students will:

58.07.01 Identify the function of a cassette, film, and screen.
58.07.02 Describe how radiation produces an image on film.
58.07.03 Identify the process by which x-ray film is developed.
58.07.04 Process a film through an automatic processor.
58.07.05 Identify anatomical position and terminology related to position (supine, prone, proximal, distal, medial, lateral, superior, inferior, anterior/ventral, and posterior/dorsal).
58.07.06 Identify patient properly (check identification band, etc.)
58.07.07 Explain appropriate exam(s) to the patient.
58.07.08 Perform safe body mechanics and transferring skills of patient onto x-ray table.
58.07.09 Position patient for exam(s) (chest, KUB, hand and foot).
58.07.10 Position x-ray tube to simulate exposure for exam(s) (chest, KUB, hand and foot).
58.07.11 Position patient in supine, prone, lateral, oblique, AP, PA of appropriate part.
58.07.12 Use an artificial arm to perform venipuncture.

59.0 SUCCESSFULLY COMPLETE A CLINICAL ROTATION IN AT LEAST 3 MAJOR ALLIED HEALTH AREAS--The student will be able to:

59.01 Demonstrate skills in the clinical setting as outlined in 58.0.
59.02 Complete three (3) clinical rotations under the supervision of a duly licensed/certified allied health care worker.
59.03 Exhibit behavior consistent with the professional ethics required of each of the allied health areas being studied.

OCCUPATIONAL COMPLETION POINT- DATA CODE G
PATIENT CARE TECHNICIAN - INDUSTRY TITLE

MODULE: PATIENT CARE TECHNICIAN

Students enrolled in this module MUST have completed ALL modules in this program. Upon completion they will be prepared as the cross trained unlicensed worker known as the Patient Care Technician.

Students completing the following intended outcomes (60.0-61.0) and the student performance standards will be able to:

60.0 DEVELOP ORGANIZATION AND MANAGEMENT SKILLS--The student will be able to:

60.01 Define terms associated with developing organization and management skills, including but not limited to analysis, assessment, evaluation, implementation, nursing process, objective and subjective symptoms, and Team Nursing Care.

60.02 Discuss the role of unlicensed assistive personnel (UAP's) in relation to the terms in 61.01.

60.03 Discuss various situations when a Patient Care Technician would utilize organizational and management skills.

60.04 List the characteristics of an effective team leader and those of effective team members.

60.05 Distinguish among management styles.

60.06 Describe delegation techniques.

60.07 Discuss the chain of command and characteristics of leader/team member relationships.

60.08 Describe evaluation techniques.

60.09 Describe giving and receiving end-of-shift reports.

61.0 PRACTICE ORGANIZATIONAL AND MANAGEMENT SKILLS IN A CLINICAL SETTING--the student will be able to:

61.01 Organize patient care in completing clinical assignments, and analyze results.

61.02 Practice coordinating patient care as the team leader of fellow students.

61.03 Evaluate techniques and management style of various student team leaders and team members.

61.04 Give an end-of-shift report.

61.05 Solve a problem using the nursing process.

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July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Pharmacy Technician
Occupational Area:	Health Science Education
	PSAV
Program Numbers	**H170507**
CIP Number	0317.050700
Grade Level	30, 31
Length	1000 hours
Certification	PHARMACY @7 G
Basic Skills	
Math	10
Language	10
Reading	10

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as pharmacy technicians (32518229), pharmacy assistants or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, metric system, medical terminology, medicinal drugs, pharmaceutical compounding, sterile techniques, maintenance of inventory, I.V. preparation, preparing purchase orders, receiving and checking supplies purchased, printing labels, typing prescription labels, delivering medications, pricing prescription drug orders and supplies, prepackaging unit dose packages, patient record systems, control records, data processing, computer application, employability skills, leadership and human relations skills, health and safety, including CPR. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory demonstration, practice and return demonstrations are essential in this program.

Clinical practicum experiences are an integral part of this program.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc. is the appropriate vocational student organization for providing leadership training experience and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Program completers will be eligible to take the (optional) state certification exam offered by the Florida Society of Hospital Pharmacists; 3360-A Capital Circle Northeast; Tallahassee, FL 32308; 904/386-8835. This certification is offered twice annually.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

State credentialing will be done in accordance with Chapter 468 F.S. In accordance with Rule 6A-10.040 F.A.C., minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 10.0, and Reading 10.0. This grade level number corresponds to a grade equivalent score obtained on a State designated basic skills examination.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Compentencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other

cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

PHARMACY TECHNICIAN - (12-20)

12.0 Demonstrate knowledge of basic pharmaceutical chemistry as it relates to the human body's anatomy, and physiology.
13.0 Initiate measurement and calculating techniques.
14.0 Identify pharmaceutical abbreviations, terminology, and classifications.
15.0 Assist with adding medications to I.V. solutions.
16.0 Prepackage unit dose packets.
17.0 Perform clerical duties.
18.0 Prepare and deliver medications.
19.0 Practice human relations skills.
20.0 Identify medical and legal considerations.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Pharmacy Technician
Postsecondary Number: H170507

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PHARMACY TECHNICIAN: Intended outcomes 12-20 lead to the occupational completion point of pharmacy technician.

12.0 DEMONSTRATE KNOWLEDGE OF BASIC PHARMACEUTICAL CHEMISTRY AS IT RELATES TO THE HUMAN BODY'S ANATOMY--The student will be able to:

12.01 Predict physical and chemical incompatibilities utilizingchemistry properties.
12.02 Describe electrolyte balances.
12.03 Relate the general classes of drugs and their main action andside effects to anatomy and physiology principles.

13.0 INITIATE MEASUREMENT AND CALCULATING TECHNIQUES--The student will be able to:

13.01 Explain the difference between a cubic centimeter and a milliliter.
13.02 Use common pharmaceutical weighing equipment.
13.03 Use common pharmaceutical volume measurement equipment.
13.04 Explain the technique of preparing a solution, a suspension, an elixir, and emulsion and an extract.
13.05 Convert measurements within the apothecary, avoirdupois, and metric systems.
13.06 Use the following arithmetic procedures: ratio and proportion; percentage.

14.0 IDENTIFY PHARMACEUTICAL ABBREVIATIONS, TERMINOLOGY, AND CLASSIFICATIONS--The student will be able to:

14.01 List the major classifications of pharmaceuticals and define each.
14.02 List the sources from which medications are produced.
14.03 Define poison; define placebo.
14.04 Using the pharmacy inventory manual, prepare a listing of the usual adult dose for each item, the medicinal uses, the contraindications and route of administration.
14.05 List the two official compendia of standards for quality and purity of drugs and authoritative information on dosage and administration and list six non-official reference manuals.
14.06 Display knowledge of trade names and generic name equivalents, chemical names.

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14.07 Use pharmaceutical medical terminology.
14.08 List the major symbols and abbreviations used on prescriptions and state the meaning of each.

15.0 ASSIST WITH ADDING MEDICATIONS TO I.V. SOLUTIONS--The student will be able to:

15.01 Compare medication order with label on vial and check expiration date of product.
15.02 Calculate drug dosage for parenteral use.
15.03 Identify common drug/drug incompatibilities.
15.04 Perform quality control check.
15.05 Prepare Parenteral Alimentation solutions.
15.06 Prepare Parenteral solutions.
15.07 Mix chemotherapeutic agents using proper safety techniques.
15.08 Use aseptic technique to withdraw medication from stock vial, measure correct quantity as instructed, select and insert it into IV solution without error.
15.09 Place label on IV solution container and keep records.
15.10 Reconstitute parenteral medications.
15.11 Use specialized equipment such as laminar flow hoods; filters, pumps, and vacuum sets; pipetters.

16.0 PREPACKAGE UNIT DOSE PACKETS--The student will be able to:

16.01 Operate unit dose pre-packet equipment.
16.02 Label packets with the required information.
16.03 Locate correct stock container.
16.04 Weigh, measure or count required individual doses of drug.
16.05 Place individual dose in appropriate containers, repackage in predetermined quantities.
16.06 Distribute or shelve packets.

17.0 PERFORM CLERICAL DUTIES--The student will be able to:

17.01 Maintain patient profiles.
17.02 Record information on patient profiles accurately.
17.03 Maintain stock inventory.
17.04 Prepare purchase orders.
17.05 Receive, store and distribute pharmaceuticals.
17.06 Type labels.
17.07 Price prescriptions and refunds.
17.08 Answer routine inquiries and refer pharmacologic inquires to pharmacist.
17.09 Collect data from medication administration record and drug use evaluation form.
17.10 Check all new orders with medications listed on profiles.

18.0 PREPARE AND DELIVER MEDICATIONS--The student will be able to:

18.01 Transport medications safely being aware of hazards: theft, legal implications of accidental loss, Harrison Narcotic Act - other consequences.

18.02 Identify hazards in hospitals such as false prescriptions, incorrect dosages, and impaired persons.
18.03 Identify special dangers to children, e.g. poisons.
18.04 Maintain controlled substances inventory.
18.05 Read and prepare medication orders correctly.

19.0 PRACTICE HUMAN RELATIONS SKILLS--The student will be able to:

19.01 Interpret the hospital organizational chart.
19.02 Describe the general duties and responsibilities of personnel listed on the chart.
19.03 Establish and maintain a health rapport with co-workers.
19.04 Identify current trends and perspectives related to the management of health care organizations.
19.05 Identify the means by which the application of sound management principles and behavior can facilitate change.

20.0 IDENTIFY MEDICAL AND LEGAL CONSIDERATIONS--The student will be able to:

20.01 Discuss the significance and scope of current national and Florida law and administrative rules as they relate to the practice of the pharmacy technician.
20.02 Discuss medical legal concepts as they relate to the practice of pharmacy technology.
20.03 Discuss the need for accurate medical documentation and recordkeeping.
20.04 State valid reasons for confidentiality of patient information.
20.05 Discuss the patients BILL OF RIGHTS/American Hospital Association.
20.06 Discuss the Harrison Narcotic Act.
20.07 List controlled substances.
20.08 Discuss "Right to Know" Act with respect to hazardous materials.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Physical Therapist Assistant
Occupational Area:	Health Science Education
	PSV
CIP Number	0317.081500
Grade Level	College Credits
Length	AS Degree/74 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as physical, corrective therapy assistants (66017449), (076.224-010) or to provide supplemental training for persons previously or currently employed in these occupations.

The program should meet the requirements of the Commission on Accreditation in Physical Therapy Education/American Physical Therapy Association, 1111 North Fairfax Street, Alexandria, VA 22314, 703/684-2782. The graduate is prepared to make an application to the Florida Physical Therapist Assistant licensing examination (Chapter 486, F.S. Physical Therapy Practice) which is given by the Florida Agency for Health Care Administration (AHCA), Board of Physical Therapy.

The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics and science occurs through classroom instruction, laboratory and clinical procedures.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Theory of physical therapy procedures is presented prior to practical application. An instructional mode of demonstration/return demonstration is appropriate. In a simulated patient setting, students administer/apply or instruct in physical therapy techniques and physical agents.

Laboratory work is structured so that students begin with basic patient care skills, progress to basic physical therapy skills and then to more advanced physical therapy application and techniques.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for this program/cluster and is printed in a supplement to this document.

The cooperative method of instruction is not appropriate for this program.

The standard credit hour length for this program is 74 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES**:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.

05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

PHYSICAL THERAPY ASSISTANT (12-26)

12.0 Describe anatomical structure, function and dysfunction of the human body related to the practice of physical therapy.
13.0 Assist the physical therapist with various treatments/procedures.
14.0 Demonstrate ethical and legal practice as a physical therapist assistant.
15.0 Respond to patient's needs as reflected in the Patient's Bill of Rights.
16.0 Demonstrate safe administration of all physical agents.
17.0 Demonstrate use of exercise, assistive/supportive devices and specialized equipment.
18.0 Perform routine maintenance of equipment.
19.0 Disinfect and sterilize materials and equipment.
20.0 Respond to acute changes in physiological state.
21.0 Teach other health care providers, patients and families to perform selected treatment procedures and functional activities.
22.0 Identify architectural barriers.
23.0 Interact with patients and families in a manner which provides desired psycho-social support.
24.0 Define scope of practice.
25.0 Describe basic concepts related to the health care system including multidisciplinary team approach, quality care, governmental agencies, private sector, role of other health care providers, health care facilities, issues and problems.
26.0 Identify basic principles of levels of authority and responsibility, planning, time management, supervisory process, performance evaluations and fiscal consideration (provider and consumer).

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Physical Therapist Assistant
POSTSECONDARY NUMBER: 0317.081500

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

PHYSICAL THERAPIST ASSISTANT: Intended outcomes 12-26 lead to the occupational completion point of Physical Therapist Assistant. The graduate is prepared to make an application to the Florida Physical Therapist Assistant licensing examination (Chapter 486, F.S. Physical Therapy Practice) which is given by the Agency for Health Care Administration (AHCA), Florida Board of Physical Therapy.

12.0 DESCRIBE ANATOMICAL STRUCTURE, FUNCTION AND DYSFUNCTION OF THE HUMAN BODY RELATED TO THE PRACTICE OF PHYSICAL THERAPY--The student will be able to:

12.01 Describe normal and abnormal motor behavior.
12.02 Describe orthopedic disabilities and related treatment.
12.03 Describe neurological disabilities and related treatment.
12.04 Describe medical/surgical conditions related to physical therapy care.
12.05 Assist physical therapist in evaluation and assessment of disabilities and conditions.

13.0 ASSIST THE PHYSICAL THERAPIST WITH VARIOUS TREATMENTS/ PROCEDURES--The student will be able to:

13.01 Prepare patients, treatment areas and equipment.
13.02 Recognize gait deviations.
13.03 Perform gait training techniques.
13.04 Assist therapist to administer activities of daily living training to clients.
13.05 Assist therapist with application of external bandages, dressings and support devices.
13.06 Implement therapeutic exercises as demonstrated by the therapist.
13.07 Measure for and fit assistive devices.
13.08 Assist in selected evaluation and assessment procedures.
13.09 Perform therapeutic massage.

14.0 DEMONSTRATE ETHICAL AND LEGAL PRACTICE AS A PHYSICAL THERAPIST ASSISTANT--The student will be able to:

14.01 Practice under the direction of a physical therapist.
14.02 Cite indications and contradictions for each treatment/procedure.

14.03 Record treatment/results in progress notes using correct format, content and terminology.
14.04 Read and draw pertinent information from patient charts.

15.0 RESPOND TO PATIENT'S NEEDS AS REFLECTED IN THE PATIENT'S BILL OF RIGHTS--The student will be able to:

15.01 Demonstrate awareness of the patient's need for dignity and independence.
15.02 Recognize patient expressions of discomfort, spoken or unspoken (body language).
15.03 Deal effectively with patient's emotional responses.

16.0 DEMONSTRATE SAFE ADMINISTRATION OF ALL PHYSICAL AGENTS--The student will be able to:

16.01 Read a variety of thermometers, Fahrenheit or centigrade (Celsius).
16.02 State normal body temperature and measure an oral or axillary temperature.
16.03 Measure the temperature of liquids, oils, solids.
16.04 State the therapeutic temperature range for modalities in which temperature is a guideline for application.
16.05 Identify physiological effects of heat vs. cold applications.
16.06 Administer therapeutic ultrasound.
16.07 Describe therapeutic use of ultra-violet light.
16.08 Demonstrate therapeutic use of physical agents such as water, heat, cold and electricity.

17.0 DEMONSTRATE USE OF EXERCISE, ASSISTIVE/SUPPORTIVE DEVICES AND SPECIALIZED EQUIPMENT--The student will be able to:

17.01 State the benefits of exercise.
17.02 Define orthotics and state the importance of proper fit.
17.03 Perform crutch walking, stair climbing, use of wheelchair.
17.04 Describe differences in wheelchairs.
17.05 Discuss upper and lower extremity prosthetics in terms of types of amputations and prosthetics.
17.06 Identify common problems in prosthetic management and apply managerial skills in dealing effectively with them.
17.07 Recognize and assist in exercise techniques used in physical therapy.
17.08 Perform postural drainage and instruct patient in proper coughing and breathing exercises.
17.09 Apply mechanical traction.
17.10 Apply intermittent venous compression.
17.11 Perform goniometric measurement.
17.12 Assist patient in use of orthotic/prosthetic devices.

18.0 PERFORM ROUTINE MAINTENANCE OF EQUIPMENT--The student will be able to:

18.01 Recognize the importance of routine maintenance.
18.02 Clean and check operation of wheelchairs, stretchers, treatment tables, etc.

19.0 DISINFECT AND STERILIZE MATERIALS AND EQUIPMENT--The student will be able to:

19.01 Define disinfect, sterilize, germicide, vaccinate, immunize, antiseptic, septic.
19.02 Disinfect used equipment.
19.03 Prepare materials for sterilization.

20.0 RESPOND TO ACUTE CHANGES IN PHYSIOLOGICAL STATE--The student will be able to:

20.01 Determine baseline physiological state.
20.02 Recognize change in baseline physiological state.
20.03 Determine significance of change in physiological state.
20.04 Apply guidelines in the assessment of blood pressure, pulse, respiration, sweating,skin color, mental alertness, skin temp, pupil size and pupil reaction.

21.0 TEACH OTHER HEALTH CARE PROVIDERS, PATIENTS AND FAMILIES TO PERFORM SELECTED TREATMENT PROCEDURES AND FUNCTIONAL ACTIVITIES--The student will be able to:

21.01 Detail equipment or treatment preparation methods.
21.02 Instruct in safety rules for equipment or treatment.
21.03 Utilize proper teaching techniques relative to level of individual's understanding.
21.04 Describe desired outcomes of the selected treatment procedure or functional activity.
21.05 Use appropriate medical terminology.

22.0 IDENTIFY ARCHITECTURAL BARRIERS--The student will be able to:

22.01 Identify which environmental factors are potential architectural barriers.
22.02 Determine which aspects of the patient's functional level and ambulatory/mobility equipment are germane to architectural problems.
22.03 Describe action required to remediate barriers.

23.0 INTERACT WITH PATIENTS AND FAMILIES IN A MANNER WHICH PROVIDES THE DESIRED PSYCHO-SOCIAL SUPPORT--The student will be able to:

23.01 Recognize own reaction to the patient's illness or disability.
23.02 Recognize patient's and family's reactions to illness and disability.
23.03 Respect individual, cultural, religious and socio-economic differences in people.
23.04 Utilize appropriate communicative processes.

24.0 DEFINE SCOPE OF PRACTICE--The student will be able to:

24.01 Demonstrate awareness of his/her own role.

24.02 Identify scope of responsibility as it relates to patient care, departmental function, physical therapist and physical therapist aide.

25.0 DESCRIBE BASIC CONCEPTS RELATED TO THE HEALTH CARE SYSTEM INCLUDING MULTI-DISCIPLINARY TEAM APPROACH, QUALITY CARE, GOVERNMENTAL AGENCIES, PRIVATE SECTOR, ROLE OF OTHER HEALTH CARE PROVIDERS, HEALTH CARE FACILITIES, ISSUES AND PROBLEMS--The student will be able to:

25.01 Describe disciplines within medical care arena and the roles served.
25.02 Describe the categories of health care agencies.
25.03 Recognize current issues and problems affecting the delivery of health care.

26.0 IDENTIFY BASIC PRINCIPLES OF LEVELS OF AUTHORITY AND RESPONSIBILITY, PLANNING, TIME MANAGEMENT, SUPERVISORY PROCESS, PERFORMANCE EVALUATIONS AND FISCAL CONSIDERATION (PROVIDER AND CONSUMER)--The student will be able to:

26.01 Organize time effectively.
26.02 Communicate information to correct individual understanding the proper chain of command.
26.03 Prepare daily work schedule for effective, efficient delivery of care.
26.04 Utilize resources efficiently and conservatively in the delivery of health care.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Practical Nursing	
Occupational Area:	Health Science Education	
	Secondary	PSAV
Program Numbers	**8418300**	**H170605**
CIP Number	0317.060500	0317.060500
Grade Level	10-12, 30, 31	30, 31
Length	8 credits	1200 hours
Certification	NURSING ED @5 REG NURSE G PRAC NURSE @7 @G	NURSING ED @5 REG NURSE G PRAC NURSE @7 @G

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as licensed practical nurses (32505217) or to provide supplemental training for a person previously or currently employed in this occupation. The program must be approved by the Florida State Board of Nursing so the graduate may take the examination to practice as a Licensed Practical Nurse.

The content includes, but is not limited to, theoretical instruction and clinical experience in medical, surgical, obstetric, pediatric, and geriatric nursing; theoretical instruction and clinical experience in both acute and long term care situations; theoretical instruction and clinical application of vocational role and function; personal, family and community health concepts; nutrition; human growth and development over the life span; body structure and function; interpersonal relationship skills, mental health concepts; pharmacology and administration of medications; legal aspects of practice; American Heart Association Basic Life Support (BLS) course C or equivalent and current issues in nursing. Clinical experience should make up at least 50% of the total program. The Human Patient Simulator may be used in place of a limited number of clinical hours with prior approval by the Florida Board of Nursing. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

Listed below are the courses that this program is comprised of when offered at the secondary level:

8418310 - Practical Nursing 1 (includes Health Careers Core)
8418320 - Practical Nursing 2
8418330 - Practical Nursing 3
8418340 - Practical Nursing 4
8418350 - Practical Nursing 5

8418360 - Practical Nursing 6
8418370 - Practical Nursing 7
8418380 - Practical Nursing 8

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES:** Simulated practice and clinical experiences are included as an integral part of this program.

Clinical Experience Rules:

(1) Each student providing direct care to patients/clients in a health care agency shall be under the supervision of a faculty member. Faculty should be responsible for supervising students on no more than two units during one clinical instruction period.

(2) No more than twelve students shall be assigned to a faculty member for supervision in providing direct care to patients/clients for any one clinical instruction period.

(3) Faculty shall be physically present within the health care agency while students are engaged in providing direct care to patients/clients.

(4) Faculty shall be immediately available by telephone to students engaged in an observational experience or assigned to family-community health experiences.

(5) Clinical facilities utilized for clinical training by students of approved programs shall provide evidence satisfactory to the Board that they meet the following requirements:

(a) Current state licensure certification.
(b) The director of nurses or person responsible for nursing services is a registered nurse currently licensed in Florida.
(c) The number and variety of patients are sufficient to meet clinical learning objectives of the nursing program.
(d) There is nursing personnel, sufficient in number currently licensed and appropriately qualified, to ensure that patients receive safe and effective care at all times.
(e) There are written job descriptions for all categories of nursing personnel which are used as a basis for assigning responsibilities.
(f) Appropriate references and current practice and procedure manuals are available on the unit where students receive experience.

(6) Nursing programs shall seek prior approval from the Board for any clinical facility utilized for student clinical instruction.

(7) It shall be the responsibility of the nursing program to obtain and maintain current contractual agreements with each agency utilized for student clinical training to ensure that the nursing program can provide the appropriate clinical experiences necessary to fulfill the requirements of these rules; and

(8) When more than one nursing program is using an agency for student clinical experience, there shall be written documentation of cooperative planning among the programs and the agency.

When a student with a disability is enrolled in a secondary vocational class with modifications to the curriculum framework, the particular ourcomes and student performance standards which the student must master to earn credit must be specified in the student's individual educational plan (IEP). Additional credits may be earned when outcomes and standards are mastered in accordance with the requirements indicated in subsequent IEPs. The job title for which the student is being trained must be designated in the IEP.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

This program must be taught by a Registered Nurse meeting the qualifications as set forth in 57S -2.005(2) F.A.C.

The Health Occupations Students of America, Inc., and a career related professional organization(s) are appropriate for providing leadership training experience and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

Students must take a state licensing examination. Minimal acceptable performance for each graduating class on the licensing examination shall be determined by the Board. Board requirements shall not exceed the national average as published by the testing service of the National Council of State Boards of Nursing, Inc.

Program must comply with the State Board of Nursing rules, including faculty qualifications, number of students admitted, length of courses, etc. There may be no deviations from an approved plan of instruction without Board of Nursing approval.

The person responsible for the day to day implementation of the classroom and clinical duties shall be given time apart from classroom and clinical responsibilities sufficient to meet the administrative needs of the program.

Students who have successfully completed the program 0317.060200, Nursing Assistant, or the program 0317.069902, Patient Care Assistant should be given appropriate recognition, such as advanced standing for demonstrating those competencies.

In accordance with rule 6A-10.040 FAC, the minimum basic skills grade level required for this program when offered at the postsecondary adult vocational level is: Mathematics 11.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for the program/cluster and is printed in a supplement to this document.

The typical length of this program for the average achieving student is 1200 hours; which includes 90 clock hours for the Health Careers Core.

A student who completes this program may substitute two required science credits in accordance with the Pupil Progression Plan. Students completing this program with a 3.5 GPA will be eligible for the Gold Seal Endorsement.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.

02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

LICENSED PRACTICAL NURSE (12.0 - 32.0)

12.0 Demonstrate computer literacy as related to nursing functions.
13.0 Use appropriate verbal and written communications in the performance of nursing functions.
14.0 Demonstrate legal and ethical responsibilities specific to the nursing profession.
15.0 Describe human growth and development.
16.0 Perform aseptic techniques.
17.0 Describe the anatomy and physiology of the human body.
18.0 Perform physical comfort and safety functions.
19.0 Provide personal patient care.
20.0 Perform nursing procedures.
21.0 Administer medication.
22.0 Apply principles of nutrition.
23.0 Provide care for medical/surgical patients, utilizing the nursing process.
24.0 Provide care for maternal/newborn patients, utilizing the nursing process.
25.0 Provide care for pediatric patients, utilizing the nursing process.
26.0 Provide care for geriatric patients, utilizing the nursing process.
27.0 Apply the principles of infection control, utilizing the nursing process.
28.0 Provide care for pre-operative and post-operative patients, utilizing the nursing process.
29.0 Provide bio-psycho-social support.
30.0 Perform supervised management functions.
31.0 Assist with rehabilitative activities.
32.0 Demonstrate employability skills specific to practical nursing.

PLEASE NOTE: The following outcomes can **only** be taken by Practical nurses who have **graduated** from their practical nursing program. The LPN/IV education must be sponsored by a provider of continuing education courses approved by the Board pursuant to Rule 57S7-5.005. To be qualified to teach this module, the instructor must be a currently licensed Registered nurse with teaching experience and nursing experience which includes IV therapy. The provider will be responsible for issuing a certificate verifying the requisite number of hours and course content.

In accordance with Rule 57S7-12.005, the module can not be less than 30 hours post-graduate level. These outcomes must be followed by supervised clinical practice as needed to demonstrate clinical competence. Verification of competence shall be the responsibility of each employing institution.

LPN/IV

33.0 Explain the legal aspects of IV administration by Practical Nurses.
34.0 Demonstrate a knowledge of the peripheral veins used for venipuncture.
35.0 Perform a venipuncture.
36.0 Discuss the effect of IV therapy on the body.
37.0 Recognize and respond to adverse reactions to IV therapy.
38.0 Recognize and use various types of IV equipment.
39.0 Administer drugs intravenously.
40.0 Care for patients receiving IV drug therapy, blood and blood components, and/or parenteral nutrition.
41.0 Describe the principles of infection control in IV therapy.
42.0 Manage special IV therapy procedures.
43.0 Recognize terminology pertinent to IV therapy.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Program Title: Practical Nursing
Secondary Number: 8418300
Postsecondary Number: H170605

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

LICENSED PRACTICAL NURSE: Intended outcomes 12-32 complete the occupational completion point of Licensed Practical Nurse. The outcomes may be taught as one or more modules at the postsecondary level.

12.0 DEMONSTRATE COMPUTER LITERACY AS RELATED TO NURSING FUNCTIONS--The student will be able to:

12.01 Demonstrate computational, keyboarding and retrieval skills relevant to job requirements of the health occupations being studied.
12.02 Identify computer skills utilized for each clinical rotation and apply, as appropriate.

13.0 USE APPROPRIATE VERBAL AND WRITTEN COMMUNICATIONS IN THE PERFORMANCE OF NURSING FUNCTIONS--The student will be able to:

13.01 Receive and give oral report of patient's status.
13.02 Report and record objective, pertinent observations.
13.03 Maintain current documentation.
13.04 Document changes in patient behavior and mental awareness.
13.05 Obtain specified data from patient and family.
13.06 Define and explain the steps in the nursing process.
13.07 Utilize the nursing process to assist with the patient's plan of care.

14.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO THE NURSING PROFESSION--The student will be able to:

14.01 Identify the components of the Nurse Practice Act.
14.02 Practice within the role and scope of the job description.
14.03 Follow policies and procedures affecting the health, safety, and well-being of patients.
14.04 Follow legal guidelines in charting.

15.0 DESCRIBE HUMAN GROWTH AND DEVELOPMENT--The student will be able to:

15.01 Describe characteristics of growth and development from conception to birth.
15.02 Describe characteristics of growth and development from birth through preschool.

15.03 Describe characteristics of growth and development from school age through adolescence.
15.04 Describe characteristics of growth and development of the adult through the life span.

16.0 PERFORM ASEPTIC TECHNIQUES--The student will be able to:

16.01 Apply principles of medical and surgical asepsis.
16.02 Apply and remove sterile gloves and gown.
16.03 Apply sterile dressing.
16.04 Open sterile equipment and supplies.
16.05 Maintain sterile field.
16.06 Clean and disinfect equipment.

17.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY--The student will be able to:

17.01 Describe the relationships of body systems in providing patient care.
17.02 Describe the structure and function of the respiratory system.
17.03 Describe the structure and function of the cardio-vascular system.
17.04 Describe the structure and function of the muscular-skeletal system.
17.05 Describe the structure and function of the nervous, skin, and sensory systems.
17.06 Describe the structure and function of the reproductive system.
17.07 Describe the structure and function of the urinary system.
17.08 Describe the structure and function of the digestive system.
17.09 Describe the structure and function of the endocrine system.

18.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS--The student will be able to:

18.01 Care for equipment and supplies.
18.02 Maintain patient environment
18.03 Maintain service areas on the units.
18.04 Observe and report patient's daily behavior.
18.05 Observe and report patient's mental awareness.
18.06 Adjust bed and side rails.
18.07 Lift, hold, or transfer a patient using good body mechanics.
18.08 Transfer patient from bed to wheelchair using mechanical lifters.
18.09 Transfer patient to stretcher.
18.10 Turn and position patient.
18.11 Apply protective devices as directed (e.g. vest, belt, wrist, and ankle mitt).
18.12 Apply comfort devices as directed (e.g. footboard, over bed cradle, sandbag, alternating pressure mattress).
18.13 Assist patient to dangle.
18.14 Assist patient to walk.
18.15 Assist patient in crutch-walking.
18.16 Assist patient in using cane.
18.17 Assist patient in using walker.

18.18 Assist patient in using wheelchair.
18.19 Demonstrate emergency evacuation procedures.

19.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

19.01 Give bed bath.
19.02 Assist with tub bath or shower.
19.03 Give shampoo.
19.04 Shave patient.
19.05 Provide skin care.
19.06 Provide foot care.
19.07 Groom hair.
19.08 Groom nails.
19.09 Assist with oral hygiene.
19.10 Give denture care.
19.11 Administer oral hygiene to an unconscious patient.
19.12 Assist with using bedside commode.
19.13 Assist with using bedpan.
19.14 Assist with using urinal.
19.15 Assist patient to dress.
19.16 Assist with meals.

20.0 PERFORM NURSING PROCEDURES--The student will be able to:

20.01 Admit patient
20.02 Assist the RN with patient assessments.
20.03 Transfer patient.
20.04 Discharge patient.
20.05 Make unoccupied/occupied bed.
20.06 Make surgical bed.
20.07 Measure and record vital signs recognizing abnormalities and danger signals.
20.08 Take and record patient's height and weight.
20.09 Assist patient in passive range of motion exercises.
20.10 Apply anti-embolic hose and sequential compression devices.
20.11 Collect routine urine specimen.
20.12 Strain urine.
20.13 Collect timed urine specimen.
20.14 Monitor catheter drainage system.
20.15 Collect clean-catch (midstream voided) urine specimen.
20.16 Monitor fluid intake and output (I&O).
20.17 Observe, record, and report patient's emesis.
20.18 Apply hot and cold applications.
20.19 Assist patient with sitz bath.
20.20 Monitor and assist with care of catheters.
20.21 Apply pelvic belt for traction.
20.22 Apply cervical collar.
20.23 Monitor chest drainage system.
20.24 Monitor patient's following special procedures (e.g. I.V.P., myelogram, MRI, CAT scan).
20.25 Apply bandage.
20.26 Apply binders.
20.27 Apply brace.
20.28 Apply splints.

20.29 Care for patient in skin and skeletal traction.
20.30 Clean tong/pin site.
20.31 Change clean dressing.
20.32 Insert urinary catheter.
20.33 Obtain specimen from patient with indwelling catheter.
20.34 Measure urine specific gravity.
20.35 Remove retention catheter.
20.36 Change ostomy appliance.
20.37 Connect nasogastric tube to suction machine.
20.38 Remove nasogastric tube.
20.39 Administer gavage feeding.
20.40 Perform neurological checks.
20.41 Give enema.
20.42 Logroll patient.
20.43 Collect stool specimen.
20.44 Collect sputum specimen.
20.45 Test stool for occult blood.
20.46 Perform naso-oral-pharyngeal suction.
20.47 Perform tracheostomy care.
20.48 Irrigate urinary catheter.
20.49 Maintain continuous urinary bladder irrigation.
20.50 Irrigate ear.
20.51 Irrigate eye.
20.52 Irrigate nasogastric tube.
20.53 Irrigate vaginal canal.
20.54 Irrigate wound.
20.55 Irrigate oral cavity.
20.56 Irrigate colostomy.
20.57 Maintain enteral feeding tubes.
20.58 Instruct patient in breathing exercises.
20.59 Obtain and test a drop of blood for sugar.
20.60 Assist with physical examination.
20.61 Assist patient with diagnostic procedures.
20.62 Set up vaporizer/humidifier.
20.63 Administer and maintain oxygen.
20.64 Perform calculation and adjust IV flow rate.
20.65 Observe intravenous infusion and report signs of adverse reactions.
20.66 Inspect insertion site, change dressing, and remove IV needle or catheter from peripheral veins.
20.67 Hang bags or bottles of hydrating fluid.
20.68 Assist with postmortem care.

21.0 ADMINISTER MEDICATION--The student will be able to:

21.01 Demonstrate accurate dosage calculation.
21.02 Demonstrate the six rights of administering medication.
21.03 Observe and respond to patient's need for medication.
21.04 Administer topical medication.
21.05 Administer inhalants.
21.06 Administer oral medication.
21.07 Administer sublingual medication.
21.08 Administer rectal medication.
21.09 Administer vaginal medication.

21.10 Administer eye medications.
21.11 Administer ear drops.
21.12 Administer nose drops.
21.13 Administer intramuscular injection (including Z-tract).
21.14 Administer intradermal injection.
21.15 Administer subcutaneous injection.
21.16 Properly obtain, monitor and document use of controlled substances.
21.17 Instill bladder medication.
21.18 Care for equipment and supplies used to administer medications.
21.19 Instruct patient regarding self-administration of medications, their expected effects and potential side effects.
21.20 Observe and communicate effects of medications.
21.21 Document administration of medication and patient's response On medical record.
21.22 Store medications properly.
21.23 Assist patient with taking self-administered prescribed medication in the home.
21.24 Demonstrate use of medication resources.

22.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

22.01 Explain regional, cultural, and religious food patterns.
22.02 Instruct patient in and maintain therapeutic diets.
22.03 List factors which must be considered when purchasing food.
22.04 Prepare a basic food plan.
22.05 List factors which must be considered when storing food safely.
22.06 Identify methods of safe food preparation.

23.0 PROVIDE CARE FOR MEDICAL/SURGICAL PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

23.01 Identify signs and symptoms of disease/disorders of the body systems.
23.02 Identify diagnostic tests used in the treatment of diseases/disorders of the body systems.
23.03 Identify medications used in the treatment of diseases/disorders of the body systems.
23.04 Identify nutritional needs of patients with diseases/disorders of the body systems.
23.05 Identify common alterations in patients with psychological disorders.
23.06 Care for the patient with respiratory disease/disorder.
23.07 Care for the patient with cardio-vascular disease/disorder.
23.08 Care for the patient with muscular-skeletal disease/disorder.
23.09 Care for the patient with nervous, skin, and sensory disease/disorder.
23.10 Care for the patient with reproductive disease/disorder.
23.11 Care for the patient with urinary disease/disorder.
23.12 Care for the patient with digestive disease/disorder.
23.13 Care for the patient with endocrine disease/disorder.

24.0 PROVIDE CARE FOR MATERNAL/NEWBORN PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

24.01 Describe prenatal care.
24.02 Assist with admitting patient to labor and delivery.
24.03 Monitor contractions.
24.04 Monitor fetal heart rate.
24.05 Recognize signs of fetal distress.
24.06 Assist with preparing patient for Caesarean.
24.07 Describe care during delivery process.
24.08 Describe Apgar score.
24.09 Suction infant's respiratory passage with bulb syringe.
24.10 Identify infant using mother's bracelet.
24.11 Weigh and measure infant.
24.12 Bathe infant.
24.13 Carry infant.
24.14 Feed infant.
24.15 Collect urine specimen from infant.
24.16 Provide post-partum care.
24.17 Perform and instruct in perineal care.
24.18 Assist and instruct in breast care.
24.19 Instruct mother in infant care.
24.20 Assist with circumcision.
24.21 Apply dressing to circumcision site.
24.22 Clean infant genitalia and diaper.
24.23 Discharge obstetric patient.

25.0 PROVIDE CARE FOR PEDIATRIC PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

25.01 Adapt nursing care for the pediatric patient.
25.02 Apply safety principles for the pediatric patient.
25.03 Describe general characteristics, particular needs, and problems of pediatric patients.
25.04 Prepare patient and family for the hospital experience.
25.05 Identify signs and symptoms of common disorders/diseases.
25.06 Implement prescribed nutritional requirement.
25.07 Provide diversion and recreational activities.

26.0 PROVIDE CARE FOR GERIATRIC PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

26.01 Identify safety principles as related to the elderly.
26.02 Adapt safety principles as related to the elderly.
26.03 Describe general characteristics, particular needs, and problems of the elderly.
26.04 Identify attitudes and living habits which promote positive mental and physical health for the elderly.
26.05 Distinguish between fact and fallacy about the aging process.
26.06 Identify signs and symptoms of common disorders/diseases.
26.07 Identify community resources and services available to the elderly.
26.08 Apply Reality Orientation Techniques.
26.09 Provide and involve patients in diversional activities.
26.10 Identify common alterations in elderly patient behavior.

26.11 Provide care for patients with special needs (e.g. impaired hearing, impaired vision, immobility, impaired body functions).
26.12 Identify common problems in drug use and abuse in the elderly.

27.0 APPLY THE PRINCIPLES OF INFECTION CONTROL, UTILIZING THE NURSING PROCESS--The student will be able to:

27.01 Provide care for patients with infectious diseases.
27.02 Set up isolation unit.
27.03 Serve isolation food tray.
27.04 Put on and remove isolation garments.
27.05 Collect specimen from isolated patient.
27.06 Remove materials from isolation unit.

28.0 PROVIDE CARE FOR PRE-OPERATIVE AND POST-OPERATIVE PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

28.01 Provide pre-operative and post-operative teaching.
28.02 Shave and prep patient.
28.03 Prepare patient for operating room.
28.04 Prepare patient's medical records for operating room.
28.05 Provide post-operative care.
28.06 Assist with post-operative discharge teaching.

29.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT--The student will be able to:

29.01 Discuss family roles and their significance to health.
29.02 List community resources for individual and family health.
29.03 Identify components of the grief process.
29.04 Respond to emotional needs of patient and family.

30.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS--The student will be able to:

30.01 Organize patient care assignments.
30.02 Complete assignments accurately and in a timely manner.
30.03 Complete requisitions.

31.0 ASSIST WITH REHABILITATIVE ACTIVITIES--The student will be able to:

31.01 List the purposes of rehabilitation program.
31.02 Assist patient with specified rehabilitation needs.
31.03 Assist patients to reach optimum level of independence.

32.0 DEMONSTRATE EMPLOYABILITY SKILLS SPECIFIC TO PRACTICAL NURSING--The student will be able to:

32.01 Demonstrate an understanding of endorsement.
32.02 Discuss various placement services and nursing registries.
32.03 Identify alternative employment opportunities for practical nurses.
32.04 Complete nursing applications in a professional manner.
32.05 Complete appropriate letters of application and resignation.

IV THERAPY: The following intended outcomes 01-11 can only be taken by graduate Practical Nurses who have completed their practical nursing program.

1.0 EXPLAIN THE LEGAL ASPECTS OF IV ADMINISTRATION BY PRACTICAL NURSES--The student will be able to:

- 1.01 Explain the Nurse Practice Act as it relates to IV therapy by LPNs.
- 1.02 Describe the policies and procedures of employing agencies as they relate to IV therapy by LPNs.
- 1.03 Chart IV therapy including all principles of charting necessary for legal documentation.
- 1.04 List the aspects of intravenous therapy which can only be given under the direct supervision of the registered professional nurse.

2.0 DEMONSTRATE A KNOWLEDGE OF THE PERIPHERAL VEINS USED FOR VENIPUNCTURE--The student will be able to:

- 2.01 Locate and identify the peripheral veins used for venipuncture.
- 2.02 Describe the function of the peripheral veins used for venipuncture.

3.0 PERFORM A VENIPUNCTURE--The student will be able to:

- 3.01 Prepare and support the patient psychologically.
- 3.02 Prepare and support the patient's family and/or visitors psychologically.
- 3.03 Prepare and support the patient physically.
- 3.04 Choose equipment appropriately.
- 3.05 Choose appropriate site(s).
- 3.06 Palpate the vein(s) adequately.
- 3.07 Insert equipment into the vein maintaining the safety of both the patient and the nurse.

4.0 DISCUSS THE EFFECT OF IV THERAPY ON THE BODY--The student will be able to:

- 4.01 Describe the relationship between intravenous therapy and the body's homeostatic and regulatory functions.
- 4.02 Discuss clinical manifestations of fluid and electrolyte imbalance.

5.0 RECOGNIZE AND RESPOND TO ADVERSE REACTIONS TO IV THERAPY--The student will be able to:

- 5.01 Recognize the signs and symptoms of local complications to IV therapy.
- 5.02 Recognize the signs and symptoms of systemic complications to IV therapy.
- 5.03 Discuss preventive measures for both local and systemic complications.
- 5.04 Describe appropriate treatment measures for both local and systemic complications.

6.0 RECOGNIZE AND USE VARIOUS TYPES OF IV EQUIPMENT--The student will be able to:

6.01 Identify various types of equipment used in administering IV therapy.
6.02 Discuss the criteria for the use of each type of equipment.
6.03 Describe how to troubleshoot for malfunction of various types of equipment.

7.0 ADMINISTER DRUGS INTRAVENOUSLY--The student will be able to:

7.01 List and utilize formulas for calculating fluid and drug administration rate.
7.02 List methods of administering drugs intravenously, including the advantages and disadvantages of each.
7.03 Utilize the principles of compatibility and incompatibility of drugs and solutions in preparing for administration.
7.04 Administer IV drugs incorporating the "five rights" of medication administration.

8.0 CARE FOR PATIENTS RECEIVING IV DRUG THERAPY, BLOOD AND BLOOD COMPONENTS, AND/OR PARENTERAL NUTRITION--The student will be able to:

8.01 Utilize the principles of chemotherapy, including protocols, actions, and side effects when caring for patients receiving drug therapy.
8.02 Manage the care of the patient receiving parenteral nutrition, including the principles of metabolism, potential complications, physical and psychological measures to ensure the desired therapeutic effect.
8.03 Manage the care of the patient receiving blood and blood components, following institutional protocols, including indications and contraindications for use and identification of adverse reactions.

9.0 DESCRIBE AND UTILIZE THE PRINCIPLES OF INFECTION CONTROL IN IV THERAPY--The student will be able to:

9.01 Use aseptic technique as related to IV therapy.
9.02 Describe ways to prevent iatrogenic infection.
9.03 Describe treatment for iatrogenic infections.

10.0 MANAGE SPECIAL IV THERAPY PROCEDURES--The student will be able to:

10.01 Describe and utilize the nursing management necessary for heparin locks.
10.02 Describe and utilize the nursing management necessary for central lines.
10.03 Describe and utilize the nursing management necessary for arterial lines.

11.0 RECOGNIZE TERMINOLOGY PERTINENT TO IV THERAPY--The student will be able to:

11.01 Define terms common to IV therapy.
11.02 Interpret written IV terms and abbreviations correctly.
11.03 Use correct IV terminology in all written and oral communications.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418310
Course Title: Practical Nursing 1
Course Credit: 1

COURSE DESCRIPTION:

This course covers the basic knowledge in nursing theory and practice and includes basic communication skills; math and science applications as it relates to nursing, legal and ethical responsibilities, human growth and development and principles of infection control.

The clinical experiences provide the student with the opportunity to apply the basic principles of theory and nursing practice and to practice basic nursing skills.

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core or any other health occupations program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

- 01.01 Identify the basic components of the health care delivery system.
- 01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
- 01.03 Describe the composition and functions of a health care team.
- 01.04 Identify the general roles and responsibilities of the individual members of the health care team.
- 01.05 Develop a basic understanding of human needs throughout the lifespan.
- 01.06 Explain the importance of maintaining professional competence through continuing education.
- 01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

- 02.01 Develop basic listening skills.
- 02.02 Develop basic observational skills and related documentation strategies in written and oral form.
- 02.03 Identify characteristics of successful and unsuccessful communication including barriers.
- 02.04 Respond to verbal and non-verbal cues.
- 02.05 Compose written communication using correct spelling, grammar, and format.

02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.

05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis..
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

12.0 DEMONSTRATE COMPUTER LITERACY AS RELATED TO NURSING FUNCTIONS--The student will be able to:

12.01 Demonstrate computational, keyboarding and retrieval skills relevant to job requirements of the health occupations being studied.
12.02 Identify computer skills utilized for each clinical rotation and apply, as appropriate.

13.0 USE APPROPRIATE VERBAL AND WRITTEN COMMUNICATIONS--The student will be able to:

13.01 Identify and use various forms of communication.
13.02 Identify barriers to communication.
13.03 use basic medical terminology and approved abbreviations.
13.04 Demonstrate effective interpersonal relationships.
13.05 Receive and give oral report of patient's status.
13.06 Report and record objective, pertinent observations.
13.07 Maintain current documentation.
13.08 Document changes in patient behavior and mental awareness.
13.09 Obtain specified data from patient and family.
13.10 Define and explain the steps in the nursing process.
13.11 Utilize the nursing process to assist with the patient's plan of care.
13.12 Demonstrate basic computer skills.

14.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO THE NURSING PROFESSION--The student will be able to:

14.01 Identify the components of the Nurse Practice Act.
14.02 Practice within the role and scope of the job description.
14.03 Follow policies and procedures affecting the health, safety, and well-being of patients.
14.04 Follow legal guidelines in charting.

15.0 DESCRIBE HUMAN GROWTH AND DEVELOPMENT--The student will be able to:

15.01 Describe characteristics of growth and development from conception to birth.
15.02 Describe characteristics of growth and development from birth through preschool.
15.03 Describe characteristics of growth and development from school age through adolescence.
15.04 Describe characteristics of growth and development of the adult through the life span.

27.0 APPLY THE PRINCIPLES OF INFECTION CONTROL, UTILIZING THE NURSING PROCESS--The student will be able to:

27.01 Provide care for patients with infectious diseases.
27.02 Set up isolation unit.
27.03 Serve isolation food tray.
27.04 Put on and remove isolation garments.
27.08 Collect specimen from isolated patient.
27.09 Remove materials from isolation unit.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418320
Course Title: Practical Nursing 2
Course Credit: 1

COURSE DESCRIPTION:

This course is a continuation of Practical Nursing 1 and covers the basic knowledge in nursing theory and practice. It includes basic nursing skills, principles of safety, normal body structure and function, and personal and vocational adjustments.

Laboratory and clinical experiences are an integral part of this course.

16.0 PERFORM ASEPTIC TECHNIQUES--The student will be able to:

16.01 Apply principles of medical & surgical asepsis.
16.02 Apply and remove sterile gloves and gown.
16.03 Apply sterile dressing.
16.04 Open sterile equipment and supplies.
16.05 Maintain sterile field.
16.06 Clean and disinfect equipment.

17.0 DESCRIBE THE ANATOMY AND PHYSIOLOGY OF THE HUMAN BODY--The student will be able to:

17.01 Describe the basic structure and function of body systems.
17.02 Describe the relationships of body systems in providing patient care.
17.03 Describe the structure and function of the respiratory system.
17.04 Describe the structure and function of the cardio-vascular system.
17.05 Describe the structure and function of the muscular-skeletal system.
17.06 Describe the structure and function of the nervous, skin, and sensory systems.
17.07 Describe the structure and function of the reproductive system.
17.08 Describe the structure and function of the urinary system.
17.09 Describe the structure and function of the digestive system.
17.10 Describe the structure and function of the endocrine system.

18.0 PERFORM PHYSICAL COMFORT AND SAFETY FUNCTIONS--The student will be able to:

18.01 Care for equipment and supplies.
18.02 Maintain patient environment.
18.03 Maintain service areas on the units.
18.04 Observe and report patient's daily behavior.
18.05 Observe and report patient's mental awareness.
18.06 Adjust bed and siderails.

18.07 Lift, hold, or transfer a patient using good body mechanics.
18.08 Transfer patient from bed to wheelchair using mechanical lifters.
18.09 Transfer patient to stretcher.
18.10 Turn and position patient.
18.11 Apply protective devices as directed (e.g. vest, belt, wrist, and ankle mitt).
18.12 Apply comfort devices as directed (e.g. footboard, overbed cradle, sandbag, alternating pressure mattress).
18.13 Assist patient to dangle.
18.14 Assist patient to walk.
18.15 Assist patient in crutch-walking.
18.16 Assist patient in using cane.
18.17 Assist patient in using walker.
18.18 Assist patient in using wheelchair.

19.0 PROVIDE PERSONAL PATIENT CARE--The student will be able to:

19.01 Give bed bath.
19.02 Assist with tub bath or shower.
19.03 Give shampoo.
19.04 Shave patient.
19.05 Provide skin care.
19.06 Provide foot care.
19.07 Groom hair.
19.08 Groom nails.
19.09 Assist with oral hygiene.
19.10 Give denture care.
19.11 Administer oral hygiene to an unconscious patient.
19.12 Assist with using bedside commode.
19.13 Assist with using bedpan.
19.14 Assist with using urinal.
19.15 Assist patient to dress.
19.16 Assist with meals.

20.0 PERFORM NURSING PROCEDURES--The student will be able to:

20.01 Admit patients.
20.02 Assist the RN with patient assessments.
20.03 Transfer patient.
20.04 Discharge patient.
20.05 Make unoccupied/occupied bed.
20.06 Make surgical bed.
20.07 Measure and record vital signs recognizing abnormalities and danger signals.
20.08 Take and record patient's height and weight.
20.09 Assist patient in passive range of motion exercises.
20.10 Apply anti-embolic hose and sequential compression devices.
20.11 Collect routine urine specimen.
20.12 Strain urine.
20.13 Collect timed urine specimen.
20.14 Monitor catheter drainage system.
20.16 Monitor fluid intake and output (I&O).
20.17 Observe, record, and report patient's emesis.

20.18 Apply hot and cold applications.
20.19 Assist patient with sitz bath.
20.20 Monitor and assist with care of catheters.
20.24 Monitor patient's following special procedures (e.g. I.V.P., myelogram, MRI, CAT scan).
20.25 Apply bandage.
20.26 Apply binders.
20.27 Apply brace.
20.28 Apply splints.
20.33 Obtain specimen from patient with indwelling catheter.
20.34 Measure urine specific gravity.
20.40 Perform neurological checks.
20.41 Give enema.
20.42 Logroll patient.
20.43 Collect stool specimen.
20.44 Collect sputum specimen.
20.58 Instruct patient in breathing exercises.
20.59 Obtain and test a drop of blood for sugar.
20.60 Assist with physical examination.
20.61 Assist patient with diagnostic procedures.
20.63 Administer and maintain oxygen.
20.64 Perform calculation and adjust IV flow rate.
20.65 Observe intravenous infusion and report signs of adverse reactions.
20.66 Inspect insertion site, change dressing, and remove IV needle or catheter from peripheral veins.
20.67 Hang bags or bottles of hydrating fluid.
20.68 Assist with postmortem care.

22.0 APPLY PRINCIPLES OF NUTRITION--The student will be able to:

22.01 Explain regional, cultural, and religious food patterns.
22.02 Instruct patient in and maintain therapeutic diets.
22.03 List factors which must be considered when purchasing food.
22.04 Prepare a basic food plan.
22.05 List factors which must be considered when storing food safely.
22.06 Identify methods of safe food preparation.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418330
Course Title: Practical Nursing 3
Course Credit: 1

COURSE DESCRIPTION:

This course provides the student with information regarding the aging process, the physical and psychosocial needs of the aged, selected medical and orthopedic conditions common to the aged and chronically ill including the management and nursing care of patients with these conditions.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skills in selected procedures, to apply the nursing process in meeting the needs of the aged and/or chronically ill patient, to practice and understand the role of the practical nurse as a member of the health team and to participate in the health teaching of the patient and family.

26.0 PROVIDE CARE FOR GERIATRIC PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

26.01 Identify safety principles as related to the elderly.
26.02 Adapt safety principles as related to the elderly.
26.03 Describe general characteristics, particular needs, and problems of the elderly.
26.04 Identify attitudes and living habits which promote positive mental and physical health for the elderly.
26.05 Distinguish general characteristics, particular needs, and problems of the elderly.
26.06 Identify signs and symptoms of common disorders/diseases.
26.07 Identify community resources and services available to the elderly.
26.08 Apply Reality Orientation Techniques.
26.09 Provide and involve patients in diversional activities.
26.10 Identify common alterations in elderly patient behavior.
26.11 Provide care for patients with special needs (e.g. impaired hearing, impaired vision, immobility, impaired body functions).
26.12 Identify common problems in drug use and abuse in the elderly.

29.0 PROVIDE BIO-PSYCHO-SOCIAL SUPPORT--The student will be able to:

29.01 Discuss family roles and their significance to health.
29.02 List community resources for individual and family health.
29.03 Identify components of the grief process.
29.04 Respond to emotional needs of patient and family.

31.0 ASSIST WITH REHABILITATIVE ACTIVITIES--The student will be able to:

31.01 List the purposes of rehabilitation program.

31.02 Assist patient with specified rehabilitation needs.
31.03 Assist patients to reach optimum level of independence.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418340
Course Title: Practical Nursing 4
Course Credit: 1

COURSE DESCRIPTION:

This course provides the student with information regarding common acute and chronic medical and surgical conditions including the management, needs and nursing care of patients with these conditions. Skills taught in this course include selected therapeutic procedures relating to these diseases and disorders.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skill in selected procedures including administration of medications, to apply the nursing process in meeting the needs of the surgical patient.

20.0 PERFORM NURSING PROCEDURES--The student will be able to:

20.15 Collect clean-catch (midstream voided) urine specimen.
20.21 Apply pelvic belt for traction.
20.22 Apply cervical collar.
20.23 Monitor chest drainage system.
20.29 Care for patient in skin and skeletal traction.
20.30 Clean tong/pin site.
20.31 Change clean dressing.
20.32 Insert urinary catheter.
20.35 Remove retention catheter.
20.36 Change ostomy appliance.
20.37 Connect nasogastric tube to suction machine.
20.38 Remove nasogastric tube.
20.39 Administer gavage feeding.
20.45 Test stool for occult blood.
20.46 Perform naso-oral-pharyngeal suction.
20.47 Perform tracheostomy care.
20.48 Irrigate urinary catheter.
20.49 Maintain continuous urinary bladder irrigation.
20.50 Irrigate ear.
20.51 Irrigate eye.
20.52 Irrigate nasogastric tube.
20.53 Irrigate vaginal canal.
20.54 Irrigate wound.
20.55 Irrigate oral cavity.
20.56 Irrigate colostomy.
20.57 Maintain enteral feeding tubes.
20.62 Set up vaporizer/humidifier.
20.67 Hang bags or bottles of hydrating fluid.

21.0 ADMINISTER MEDICATION--The student will be able to:

21.01 Demonstrate accurate dosage calculation.
21.02 Demonstrate the six rights of administering medication.
21.03 Observe and respond to patient's need for medication.
21.04 Administer topical medication.
21.05 Administer inhalants.
21.06 Administer oral medication.
21.07 Administer sublingual medication.
21.08 Administer rectal medication.
21.09 Administer vaginal medication.
21.10 Administer eye medications.
21.11 Administer ear drops.
21.12 Administer nose drops.
21.13 Administer intramuscular injection (including z-tract).
21.14 Administer intradermal injection.
21.15 Administer subcutaneous injection.
21.16 Properly obtain, monitor and document use of controlled substances.
21.17 Instill bladder medication.
21.18 Care for equipment and supplies used to administer medications.
21.19 Instruct patient regarding self-administer medications, their expected effects and potential side effects.
21.20 Observe and communicate effects of medications.
21.21 Document administration of medication and patient's response on medical record.
21.22 Store medications properly.
21.23 Assist with taking self-administered prescribed medication in the home.
21.24 Demonstrate use of medication resources.

23.0 PROVIDE CARE FOR MEDICAL/SURGICAL PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

23.01 Identify signs and symptoms of disease/disorders of the body systems.
23.02 Identify diagnostic tests used in the treatment of diseases/disorders of the body systems.
23.03 Identify medications used in the treatment of diseases/disorders of the body systems.
23.04 Identify nutritional needs of patients with diseases/disorders of the body systems.
23.05 Identify common alterations in patients with psychological disorders.
23.06 Care for the patient with respiratory disease/disorder.
23.07 Care for the patient with cardio-vascular disease/disorder.
23.08 Care for the patient with muscular-skeletal disease/disorder.
23.09 Care for the patient with nervous, skin, and sensory disease/disorder.
23.10 Care for the patient with reproductive disease/disorder.
23.11 Care for the patient with urinary disease/disorder.
23.12 Care for the patient with digestive disease/disorder.
23.13 Care for the patient with endocrine disease/disorder.

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28.0 PROVIDE CARE FOR PRE-OPERATIVE AND POST-OPERATIVE PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

28.01 Provide pre-operative and post-operative teaching.
28.02 Shave and prep patient.
28.03 Prepare patient for operating room.
28.04 Prepare patient's medical records for operating room.
28.05 Provide post-operative care.
28.06 Assist with post-operative discharge teaching.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418350
Course Title: Practical Nursing 5
Course Credit: 1

COURSE DESCRIPTION:

This course is a continuation of Practical Nursing 4. Clinical experiences will allow the student to practice the role of the practical nurse as a member of the health team and to participate in the health teaching of the patient and family.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418360
Course Title: Practical Nursing 6
Course Credit: 1

COURSE DESCRIPTION:

This course will provide the student with information relating to normal pregnancy, labor and delivery, the puerperium and the normal newborn. Selected deviation from the normal in all of these areas is also covered. Management, needs and nursing care of the mother and infant throughout the maternity cycle are emphasized. Skills taught in this course include selected therapeutic procedures relating to the care of the obstetrical patient and the newborn.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skill in selected procedures, to apply nursing process in meeting the needs of the obstetrical patient and the newborn, to practice the role of the practical nurse as a member of the health team and to participate in the health teaching of the patient and family.

24.0 PROVIDE CARE FOR MATERNAL/NEWBORN PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

24.01 Describe prenatal care.
24.02 Assist with admitting patient to labor and delivery.
24.03 Monitor contractions.
24.04 Monitor fetal heart rate.
24.05 Recognize signs of fetal distress.
24.06 Assist with preparing patient for Caesarean.
24.07 Describe care during delivery process.
24.08 Describe Apgar score.
24.09 Suction infant's respiratory passage with bulb syringe.
24.10 Identify infant using mother's bracelet.
24.11 Weigh and measure infant.
24.12 Bathe infant.
24.13 Carry infant.
24.14 Feed infant.
24.15 Collect urine specimen from infant.
24.16 Provide post-partum care.
24.17 Perform and instruct in perineal care.
24.18 Assist and instruct in breast care.
24.19 Instruct mother in infant care.
24.20 Assist with circumcision.
24.21 Apply dressing to circumcision site.
24.22 Clean infant genitalia and diaper.
24.23 Discharge obstetric patient.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418370
Course Title: Practical Nursing 7
Course Credit: 1

COURSE DESCRIPTION:

This course provides the student with information relating to normal patterns of growth and development and common illnesses occurring in childhood including needs and nursing care of the child. Skills taught in this course include selected therapeutic procedures including administration of medications.

The clinical experience provides the student with the opportunity to build on acquired knowledge and skills, to practice and develop skill in selected procedures, to apply the nursing process in meeting the needs of the child to practice the role of the practical nurse as a member of the health team and to participate in the health teaching of the child and family.

25.0 PROVIDE CARE FOR PEDIATRIC PATIENTS, UTILIZING THE NURSING PROCESS--The student will be able to:

25.01 Adapt nursing care for the pediatric patient.
25.02 Apply safety principles for the pediatric patient.
25.03 Describe general characteristics, particular needs, and problems of pediatric patients.
25.04 Prepare patient and family for the hospital experience.
25.05 Identify signs and symptoms of common disorders/diseases.
25.06 Implement prescribed nutritional requirement.
25.07 Provide diversion and recreational activities.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

Course Number: 8418380
Course Title: Practical Nursing 8
Course Credit: 1

COURSE DESCRIPTION:

This course will provide the student with the opportunity to learn to plan, administer, and evaluate the nursing care of patients with complicated disorders of all systems of the body. Experiences will afford students with the opportunity to study the comprehensive principles of nursing dealing with the entire health team. Emphasis is placed on the development of confidence in performing nursing skills, skills in group planning for patient care, and the utilization of all available hospital and community resources for meeting the total needs of the patient. Employability skills and NCLEX review are included.

30.0 PERFORM SUPERVISED MANAGEMENT FUNCTIONS--The student will be able to:

30.01 Organize patient care assignments.
30.02 Complete assignments accurately and in a timely manner.
30.03 Complete requisitions.

32.0 DEMONSTRATE EMPLOYABILITY SKILLS SPECIFIC TO PRACTICAL NURSING--The student will be able to:

32.01 Demonstrate an understanding of endorsement.
32.02 Discuss various placement services and nursing registries.
32.03 Identify alternative employment opportunities for Practical Nurses.
32.04 Complete nursing applications in a professional manner.
32.05 Complete appropriate letters of application and resignation.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Psychiatric Technology
Occupational Area: Health Science Education

PSAV

Program Numbers **H181106**
CIP Number 0318.110600
Grade Level 30, 31
Length 450 hours
Certification Coverage: PRAC NURSE @7 @G
REG NURSE G
MENT HEAL @7 G

Basic Skills
Math 8
Language 8
Reading 8

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as psychiatric aides (66014446) or psychiatric technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, nursing assistant skills, physical assessment, depression, schizophrenia, personality disorders, charting, obsessive compulsive behavior, anxiety values, crisis intervetion, coma, hallucinations, organic brain syndrome, manic/ depressive illness, electro convulsive therapy, group therapy, medications, adjunctive therapy, employability skills, leadership and human relations skills, and health and safety, including CPR. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory activities and clinical experiences are an integral part of this program which should be correlated with the didactic instruction.

III. **SPECIAL NOTE:** This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 8.0, Language 8.0, and Reading 8.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed, and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The typical length of this program for the average achieving student is 450 clock hours which includes 90 clock hours for the Health Careers Core.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

PSYCHIATRIC TECHNICIAN (12-19)

12.0 Participate in observing patients' physical and behavioral reactions to medications.
13.0 Provide emergency services through crisis intervention techniques and/or medications as prescribed.
14.0 Conduct individual, group, remotivation, family and drug discussion groups to facilitate patients' rehabilitation.
15.0 Participate in home visits and crisis intervention to prevent hospitalization or rehospitalization.
16.0 Participate as a member of a multi-disciplinary team in the planning and implementation of treatment for individual patients.
17.0 Provide services to staff for treatment programs at the ward level in terms of therapeutic communities and patient government.
18.0 Perform skills assisting other professional staff.
19.0 Use human relations skills in motivating others.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Psychiatric Technology
POSTSECONDARY NUMBER: H181106

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

PSYCHIATRIC AIDE - OES Code 66014446

Students completing this module have met the requirements for the occupational exit of psychiatric aides (66014440) or psychiatric technicians.

12.0 PARTICIPATE IN OBSERVING PATIENTS' PHYSICAL AND BEHAVIORAL REACTIONS TO MEDICATIONS--The student will be able to:

12.01 List the observable physical signs indicating a medication reaction which should be reported.
12.02 Discuss behavioral changes which might occur from medications other than expected changes.
12.03 Seek assistance and initiate resuscitation measures when appropriate.
12.04 Report completely and accurately to team leader or head nurse.

13.0 PROVIDE EMERGENCY SERVICES THROUGH CRISIS INTERVENTION TECHNIQUES AND/OR MEDICATIONS AS PRESCRIBED--The student will be able to:

13.01 Recognize suicidal behavior as a cry for help and provide emergency psychologic aid by establishing open communication, reminding the patient of his identity, and help him to identify the problem which precipitated the crisis.
13.02 Offer constructive help with the problem.
13.03 Remind the patient that others care.
13.04 Record/report events accuratley.
13.05 Assist with medication if ordered.
13.06 Maintain professional growth through attending conferences, workshops and inservice programs, and reading current literature on this topic.
13.07 Discuss the methods of suicide.
13.08 Observe suicidal patient and note the hazards.

14.0 CONDUCT INDIVIDUAL, GROUP, REMOTIVATION, FAMILY AND DRUG DISCUSSION GROUPS TO FACILITATE PATIENTS' REHABILITATION--The student will be able to:

14.01 Demonstrate sensitivity to patient's verbal and non verbal communication, changes in thought processes, mood and behavior.

14.02 Document clinical condition of patient's progress and responses to therapy and patient teaching.
14.03 Execute skillful interactions.
14.04 Maintain the professional attitude of a therapeutic environment.
14.05 Discuss four kinds of involuntary admissions.
14.06 Discuss elopement precautions, methods, and patient observation.
14.07 Describe four techniques used in a physical assessment.
14.08 Examine the patient's head and neck and list the pertinent items to observe.
14.09 List causes of changes in skin color, moisture, texture, temperature, mobility, and turgor.
14.10 Describe normal pupillary reactions-direct and consensual constriction and accomodation.

15.0 PARTICIPATE IN HOME VISITS AND CRISIS INTERVENTION TO PREVENT HOSPITALIZATION OR REHOSPITALIZATION--The student will be able to:

15.01 Accept this expanded role as delegated by the head nurse.
15.02 Accompany patient to home if requested by head nurse.
15.03 Accompany the psychiatric nurse or physician to a patients home if assigned.
15.04 Assist in planned care.

16.0 PARTICIPATE AS A MEMBER OF A MULTI_DISCIPLINARY TEAM IN THE PLANNING AND IMPLEMENTATION OF TREATMENT FOR INDIVIDUAL PATIENTS--The student will be able to:

16.01 Relate unit problems and needs to the team leader, or head nurse as appropriate.
16.02 Contribute to the formulation of unit goals for individual patient.
16.03 Share in the planning, decision-making through staff meetings.
16.04 Support hospital policies and procedures as well as use the procedure manual for the psychiatric unit.
16.05 Display understanding of the limitations of the role of the psychiatric technician.
16.06 Display cooperation when asked to work other shifts or change assignments.
16.07 Demonstrate ability to function independently without constant supervision.
16.08 Show respect for coworkers and be able to interpret the organizational chart.
16.09 Maintain own proper physical, emotional, and mental health through proper application of body mechanics giving constructive criticism, and utilizing appropriate coping mechanisms.

17.0 PROVIDE SERVICES TO STAFF FOR TREATMENT PROGRAMS AT THE WARD LEVEL IN TERMS OF THERAPEUTIC COMMUNITIES AND PATIENT GOVERNMENT--The student will be able to:

17.01 Promote a healthy interpersonal relationship with peers - show respect and recognition.
17.02 Initiate or assist in the orientation, education and training of new persons on the unit.
17.03 Facilitate positive communication among peers.
17.04 Give pertinent report to other members of the health care team regarding assigned patient care.
17.05 Demonstrate understanding of the condition of assigned patients.
17.06 Collaborate with other team members in proper application of the nursing process (assessment, planning, implementation and evaluation).
17.07 Adhere to proper dress code.
17.08 List and explain four objectives of a health history.

18.0 PERFORM SKILLS ASSISTING OTHER PROFESSIONAL STAFF--The student will be able to:

18.01 Weigh and measure patient.
18.02 Record intake and output.
18.03 Perform urine sugar and acetone tests.
18.04 Perform catheter care.
18.05 Apply restraints as ordered.
18.06 Perform decubitus care.
18.07 Perform bed baths and assist patient with tub or shower.
18.08 Make beds.
18.09 Assist with electroconvulsive therapy (ECT).
18.10 Give pre and post ECT care.
18.11 Discuss the use of the seclusion room.
18.12 Formulate a care plan consulting directly with team leader.
18.13 Discuss the following behaviors: aggressive patient, depressed patient, withdrawn patient, hallucinating patient, delusional patient, suspicious patient, anxious patient, manipulative patient.

19.0 USE HUMAN RELATIONS SKILLS IN MOTIVATING OTHERS--The student will be able to:

19.01 Intervene appropriately in nursing care rather than rely on a rigidly structured plan of care.
19.02 Ensure quality patient care by developing good rapport and understanding of patient needs.
19.03 Recognize that all human behavior is meaningful and goal directed.
19.04 Promote effective communication through skillful interviewing techniques and base assessments and therapeutic decisions on an understanding of the patients psychodynamics.
19.05 Demonstrate skill in using a one to one relationship with the patient based on an understanding of psychodynamics.
19.06 Obtain meaningful information leading to an appropriate nursing intervention.
19.07 State three behaviors which are essential in an effective nurse/patient relationship.
19.08 Differentiate between direct and open-ended questioning.

19.09 Listen carefully and nonjudgmentally.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Radiation Protection Technology
Occupational Area:	Health Science Education
	PSV
CIP Number	0341.020300
Grade Level	College Credits
Length	AS Degree/65 credit hours

CERTIFICATION COVERAGE:

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as engineering technicians, radiation monitors (199.167-010), scientific helpers (199.364-019), or radiation protection technicians or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, nuclear and radiation physics; detection, control and measurement of radioactive materials; legal and ethical aspects; worker and public protection against radioactivity; health and safety including CPR; and employability skills. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory and field activities incorporate practical application of scientific principles and are a required portion of this program.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

After three years experience in the nuclear power industry, graduates are eligible to take the certification examination given by the National Registry for Radiation Protection Technicians provided security requirements have been met.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 65 credit hours according to Rule 6A-14.030.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.

04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

RADIATION PROTECTION TECHNICIAN (12-20)

12.0 Demonstrate knowledge of protection standards and professional aspects related to the use of fissionable and radioactive materials.
13.0 Demonstrate knowledge of basic and applied mathematics and science required for understanding and practice of radiological protection techniques.
14.0 Demonstrate knowledge of detection, sources, decay, interaction and measurement of radioactivity.
15.0 Demonstrate knowledge of worker and public protection against the biological effects and risks of exposure to ionizing radiation.
16.0 Demonstrate knowledge of the handling of radioactive materials and radioactive contamination control.
17.0 Demonstrate knowledge of radiation exposure control.
18.0 Demonstrate knowledge of calibration and use of instruments to measure and detect radiation.
19.0 Demonstrate knowledge of environmental radiation monitoring and control.
20.0 Demonstrate knowledge of nuclear power plant technology and radiation control procedures.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Radiation Protection Technology
POSTSECONDARY NUMBER: 0341-020300

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis..
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

RADIATION PROTECTION TECHNICIANS: Students completing intended outcomes 12-20 have met the requirements for the occupational completion point of engineering technicians, radiation monitors (199.167-010), scientific helpers (199.364-019), or radiation protection technicians.

12.0 DEMONSTRATE KNOWLEDGE OF PROTECTION STANDARDS AND PROFESSIONAL ASPECTS RELATED TO THE USE OF FISSIONABLE AND RADIOACTIVE MATERIALS--The student will be able to:

12.01 Demonstrate knowledge of the professional responsibilities of persons using fissionable and radioactive materials.
12.02 Demonstrate knowledge of radiation protection standards and guidelines and identify related regulatory and advisory organizations.
12.03 Demonstrate knowledge of Nuclear Regulatory Commission (NRC) and Department of Transportation (DOT) standards and their implementation.

13.0 DEMONSTRATE KNOWLEDGE OF BASIC AND APPLIED MATHEMATICS AND SCIENCE REQUIRED FOR UNDERSTANDING AND PRACTICE OF RADIOLOGICAL PROTECTION TECHNIQUES--The student will be able to:

13.01 Practice basic mathematics, metric conversion and graphing skills.
13.02 Use exponents, radicals, scientific notation and manipulate algebraic expressions as required in radiological protection technology.
13.03 Demonstrate knowledge of chemical structures, properties and the solution of simple chemical equations.

14.0 DEMONSTRATE KNOWLEDGE OF DETECTION, SOURCES, DECAY, INTERACTION AND MEASUREMENT OF RADIOACTIVITY--The student will be able to:

14.01 Characterize alpha particles, beta particles, gamma rays and neutrons.
14.02 Demonstrate knowledge of radioactivity and radioactive decay.
14.03 Identify and quantify major sources of background radiation and those sources of radiation routinely found in nuclear power plants.

14.04 Identify radiological quantities, differentiate between dose and dose rate and convert radiological units to respective subunits.
14.05 Demonstrate knowledge of the principles of radiation detection and measurement.
14.06 Apply exponential buildup and decay in solving radioactive decay and gamma ray shielding problems.
14.07 Demonstrate knowledge of isotopes, mass-energy equivalence, nuclear forces, binding energy, and simple nuclear equations.
14.08 Demonstrate knowledge of fission and fusion and related yields.
14.09 Demonstrate knowledge of the statistical nature of radioactive decay, calculation of minimum detectable activity and the importance of the statistical accuracy of measurement.

15.0 DEMONSTRATE KNOWLEDGE OF WORKER AND PUBLIC PROTECTION AGAINST THE BIOLOGICAL EFFECTS AND RISKS OF EXPOSURE TO IONIZING RADIATION--The student will be able to:

15.01 Demonstrate knowledge of the biological effects and risks associated with exposure to ionizing radiation.
15.02 Describe the acute radiation syndrome.
15.03 Describe the somatic and genetic effects of radiation exposure.
15.04 Identify the long-term health risks associated with low-level radiation exposure as related to personal and public health concerns.
15.05 Estimate dose to internal organs from swallowing and breathing radioactivity.
15.06 Define derived air concentration in air (DACs).
15.07 Discuss biological half-life and effective half-life.

16.0 DEMONSTRATE KNOWLEDGE OF THE HANDLING OF RADIOACTIVE MATERIALS AND RADIOACTIVE CONTAMINATION CONTROL--The student will be able to:

16.01 Demonstrate knowledge of dangers engendered by and techniques for decontamination of spilled and mishandled radioactive materials.
16.02 Identify the sources of radioactive contamination.
16.03 Demonstrate proper survey techniques.
16.04 Demonstrate proper techniques and procedures for limiting the spread of radioactive contamination.
16.05 Post contamination areas properly with required signs.
16.06 Identify, plan contamination monitoring systems, related operating principles and capabilities.
16.07 Properly select, don and remove anticontamination clothing.
16.08 Demonstrate knowledge of radioactive material storage and related procedures.
16.09 Implement regulatory procedures for shipping and receiving radioactive materials.
16.10 Describe solid waste compactor operations and related problems.
16.11 Describe controls governing radiological waste systems and contaminated laundry.
16.12 Discuss procedures for mininizing solid and liquid radioactive waste.

16.13 Demonstrate knowledge of the hazards associated with waste solidification.

17.0 DEMONSTRATE KNOWLEDGE OF RADIATION EXPOSURE CONTROL--The student will be able to:

17.01 Demonstrate knowledge and use of selected respiratory equipment.
17.02 Discuss entering confined spaces and working under subatmospheric conditions when applicable.
17.03 Define personnel dosimetry requirements for gamma rays, beta particles and neutrons and identify related long term effects of this exposure.
17.04 Explain the operating characteristics of dosimeters worn by personnel and relative advantages and disadvantages.
17.05 Discuss personnel dosimetry administrative control and exposure records.
17.06 Utilize the principles of time, distance, and shielding to reduce personnel exposure.

18.0 DEMONSTRATE KNOWLEDGE OF CALIBRATION AND USE OF INSTRUMENTS TO MEASURE AND DETECT RADIATION--The student will be able to:

18.01 Describe the operation and characteristics of radiation detectors, dosimeters and single and multi-channel analyzers.
18.02 Describe the factors affecting instrument efficiency and calculation of efficiency.
18.03 Differentiate between radiation field survey instruments and radioactive contamination survey instruments.
18.04 Perform gamma ray shielding calculations.
18.05 Convert meter reading to radioactivity levels.
18.06 Demonstrate the use of portable air sampling equipment.
18.07 Describe the operation of CAM's, ARM's, hand and foot monitors and portal monitors.
18.08 Operate and calibrate radiological survey and monitoring instruments.

19.0 DEMONSTRATE KNOWLEDGE OF ENVIRONMENTAL RADIATION MONITORING AND CONTROL--The student will be able to:

19.01 Identify ventilation and filtration systems in a nuclear power plant.
19.02 Identify techniques for reducing airborne activity.
19.03 Identify airborne radionuclides in a nuclear power plant.
19.04 Demonstrate knowledge of environmental sampling and evaluation.

20.0 DEMONSTRATE KNOWLEDGE OF NUCLEAR POWER PLANT TECHNOLOGY AND RADIATION CONTROL PROCEDURES--The student will be able to:

20.01 Demonstrate knowledge of plant safety and containment of radioactivity.
20.02 Demonstrate knowledge of the purpose and major components of a nuclear power plant.
20.03 Describe flow paths and interactions of plant systems.

20.04 Demonstrate knowledge of nuclear power plant operations, maintenance and operating procedures.

20.05 Identify radiological conditions which could result in accidents.

20.06 Demonstrate knowledge of radiological emergency procedures.

20.07 Demonstrate knowledge of incident evaluation and control.

Florida Department of Education
CLUSTER CURRICULUM FRAMEWORK

Cluster Title: Respiratory
Cluster Type: Job Preparatory
Occupational Area: Health Science Education
Components : Core, Two Programs, And Two Occupational Completion Points

	PSAV	PSV
Grade Level:	See Individual Programs	
Facility Code:	252	
VSO:	HOSA	HOSA
Coop Method:	No	No
Apprenticeship:	No	No

I. **PURPOSE:** The purpose of the programs in this cluster is to prepare students for employment or advanced training in respiratory care (32302171). The programs in the cluster also provide supplemental training for persons previously or currently employed in these professions.

Respiratory Care Technician content includes, but is not limited to, biological and physical sciences basic to understanding the functioning of the cardiopulmonary systems, such as anatomy, physiology, medical terminology, chemistry, mathematics, microbiology, physics, therapeutic/diagnostic procedures, clinical medicine, patient assessment and clinical experiences. Clinical training in routine and special procedures applicable to neonatal, pediatric, adult, and geriatric patients is also provided. The program of study also includes social sciences basic to understanding how to relate with patients and includes topics such as psychology, communication skills, and medical ethics. The content also includes computer science. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Respiratory Care content includes, but is not limited to, biological and physical sciences basic to understanding the functioning of the cardiopulmonary system, such as anatomy, physiology, medical terminology, chemistry, mathematics, microbiology, physics, therapeutic/diagnostic procedures, clinical medicine and patient assessment. The instruction for the Respiratory Care program is more extensive in order to provide the knowledge and experience necessary to prepare the student to function in situations of unsupervised patient contact requiring individual judgement as a registered Respiratory Therapist. The program of study also includes social sciences basic to understanding how to relate with patients and includes topics such as psychology, communication skills and medical ethics. Clinical training in routine and special procedures applicable to neonatal, pediatric, adult, geriatric patients and those with varying degrees of cardiopulmonary impairment are also provided. The content also includes computer science.

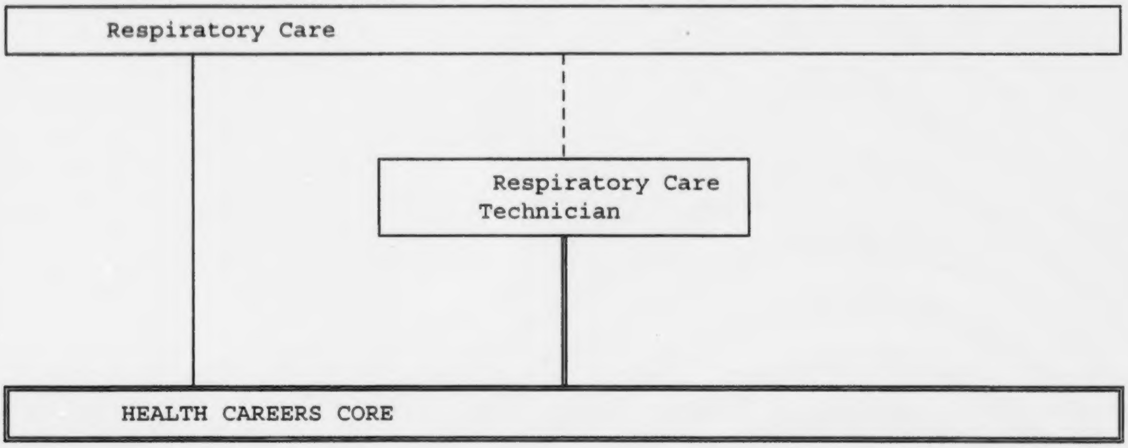
This cluster of programs focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **CLUSTER STRUCTURE:** This cluster is a planned sequence of instruction consisting of a core, two programs and two occupational completion points. When the recommended sequence is followed, the structure will allow students to complete specified portions of the program for employment or remain for advanced training. This cluster meets the goals of TECH PREP and fosters statewide articulation.

Students must complete the core, or demonstrate the mastery of skills standards contained in the core, before advancing in either of the programs:

RESPIRATORY CARE TECHNICIAN
RESPIRATORY CARE

THE FOLLOWING DIAGRAM ILLUSTRATES THE **CLUSTER STRUCTURE:**



organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this cluster and is printed in a supplement to this document.

III. **LABORATORY ACTIVITIES**: Clinical education and laboratory activities shall be supervised and should include the following: a clinical education center that offers a sufficient and well-balanced variety of respiratory therapy procedures and equipment; supervision of all clinical assignments; integration of the planning and structure of clinical education with the didactic portion of the curriculum; laboratory practicum for student demonstration and practice of essential clinical skills under simulated conditions prior to assuming actual clinical responsibilities; laboratory practicum for principles and procedures of respiratory care, their evaluation and assurance, and a valid plan for clinical assignments and rotations. The Human Patient Simulator (HPS) may be used to fulfill and/or enhance limited clinical hours prior to approval by regulatory boards and/or accrediting agencies.

IV. **SPECIAL NOTES**: The programs in this cluster meet the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Health Occupations Students of America, Inc., is the appropriate vocational student organization as well as participation in a career related professional organization for providing leadership training experiences and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum [6A-6.064(7),F.S.].

The program must be approved by the American Medical Association, Commission on Accreditation of Allied Health Education Programs (CAAHEP); 515 North State Street, Suite 7530; Chicago, Illinois 60610-4377; (312) 464-4623. Program compliance with the essentials and guidelines are monitored by the Joint Review Committee for Respiratory Therapy Education. State credentialling will be done by the Florida Agency for Health Care Administration in accordance with Chapter 468, F.S. and Rule Chapters 59R-70, F.A.C.

In accordance with Rule 6A-10.040, FAC, the minimum basic skills grade level required for postsecondary adult vocational students to exit the programs in this cluster are listed at the program level or at the occupational completion points within the program. These grade level numbers correspond to a grade equivalent score obtained on one of the state designated basic skills examinations. If a student does meet the basic skills level required for completion from the program, remediation should be provided concurrently in the System for Applied Individualized Learning (SAIL) lab prior to admission in an Adult Basic Education (ABE) setting.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, an d use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and high-order thinking skills.

Equipment List: A generic equipment list is available for this cluster and is printed in a supplement to this document.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Respiratory Care Technician Program

	PSAV
Program Numbers	**H170819**
CIP Numbers	0317.081900
Grade Level	30, 31
Length	1350 hours
Certification	RESP THER @7 G RESP TEC @7 G
Basic Skills	
Math	10
Language	11
Reading	11

MAJOR CONCEPTS/CONTENT: The respiratory care technician specializes in the technical details of general respiratory therapeutics. Technicians may assume clinical responsibility for specified respiratory care modalities involving the application of well defined therapeutic techniques under the direct or indirect supervision of a physician.

The respiratory care technician's role does require the exercising of independent, clinical judgment in various health care settings to include the home environment; however, the technician is expected to adjust or modify therapeutic techniques within well-defined procedures and based on a limited range of patient responses. Therefore, the effective use of the technician, especially in the critical care setting, requires that a physician be available for consultation.

The respiratory care technician's scope of patient care includes, but is not limited to the following respiratory care modalities under direct or indirect supervision by a physician: intermittent positive pressure breathing (IPPB); humidity/aerosol therapy; including the administration of aerosolized medicants under physician prescription; medical gas therapy; pulmonary drainage procedures; and cardiopulmonary resuscitation; pulmonary function testing; drawing/analyzing arterial and venous blood gases, and airway management. Further the technician may perform continuous ventilation, cleaning, sterilization, infection control, cardiorespiratory rehabilitation, and general maintenance of equipment.

INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

RESPIRATORY CARE TECHNICIAN - Industry Title (12 - 16)

12.0 Select, review, obtain, and interpret patient data.
13.0 Select, assemble, and check equipment for proper function, operation, and cleanliness.
14.0 Initiate, conduct and modify prescribed therapeutic procedures.
15.0 Maintain records and communications.
16.0 Demonstrate knowledge of employment requirements as a Respiratory Care Professional.

RESPIRATORY CARE - (17-21)

17.0 Adapt appropriate respiratory care procedures to the home care environment.
18.0 Perform advanced respiratory care procedures.
19.0 Administer cardiorespiratory drugs.
20.0 Assist the physician with special respiratory therapy procedures.
21.0 Demonstrate leadership and supervisory skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Respiratory Care Technician
POSTSECONDARY NUMBER: H170819

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

RESPIRATORY CARE TECHNICIAN -- Intended outcomes 12-16 are required to complete the occupational completion point of respiratory care technicians, respiratory therapy technicians (32302169).

12.0 SELECT, REVIEW, OBTAIN AND INTERPRET DATA--The student will be able to:

12.01 Review existing data in patient record, and recommend diagnostic procedures based on all available patient information.
  12.01.01 Review existing data in patient record.
  12.01.02 Recommend procedures to obtain additional data.
12.02 Collect and evaluate additional pertinent clinical information.
  12.02.01 Assess patient's overall cardiopulmonary status by inspection.
  12.02.02 Assess patient's overall cardiopulmonary status by palpation.
  12.02.03 Assess the patient's overall cardiopulmonary status by auscultation.
  12.02.04 Interview patient.
  12.02.05 Inspect chest x-ray to determine position of endotracheal or tracheostomy tube.
12.03 Perform procedures and interpret results.
  12.03.01 Perform and/or interpret results of bedside procedures.
  12.03.02 Perform and interpret results.
  12.03.03 Interpret co-oximetry results.
12.04 Determine the appropriateness of the prescribed respiratory care plan, recommend modifications where indicated, and participate in the development of the respiratory care plan.
  12.04.01 Review planned therapy to establish therapeutic goals.
  12.04.02 Determine appropriateness of prescribed therapy and goals for identified pathophysiological state.
  12.04.03 Recommend changes in therapeutic plan (based on data) if indicated.
  12.04.04 Participate in development of respiratory care plan.

13.0 SELECT, ASSEMBLE, AND CHECK EQUIPMENT FOR PROPER FUNCTION, OPERATION AND CLEANLINESS--The student will be able to:

13.01 Select and obtain equipment, and assure cleanliness of equipment appropriate to the respiratory care plan which includes, but is not limited to oxygen administration devices, humidifiers, aerosol generators, ventilators, artificial airways, suctioning devices,gas delivery, metering, and clinical analyzing devices, manometers and gauges, resuscitation devices, incentive breathing devices, patient breathing circuits, percussors and vibrators, environmental devices - aerosol (mist) tents, metered dose inhalers (MDI) and spacers, and assure selected equipment cleanliness.

13.02 Assemble, check for proper function, identify malfunctions of equipment, and take action to correct malfunctions of equipment which includes, but is not limited to oxygen administration devices, humidifiers, aerosol generators, resuscitation devices, ventilators, artificial airways, gas delivery, metering and clinical analyzing devices, suctioning devices, patient breathing circuits, incentive breathing devices, environmental devices - aerosol (mist) tents, percussors and vibrators, metered dose inhalers (MDI) and spacers and manometers and gauges.

14.0 INITIATE, CONDUCT, AND MODIFY PRESCRIBED THERAPEUTIC PROCEDURES--The student will be able to:

14.01 Explain planned therapy and goals to patients; maintain records and communication; and protect patient from nosocomial infection.

- 14.01.01 Explain planned therapy and goals to patient in understandable terms to achieve optimal therapeutic outcome.
- 14.01.02 Maintain records and communication.
- 14.01.03 Protect patient from nosocomial infection by adherence to infection control policies and procedures (universal precautions, blood and body fluid precautions, etc.).

14.02 Conduct therapeutic procedures to achieve maintenance of patent airway, including the care of artificial airways; and to achieve removal of bronchopulmonary secretions.

- 14.02.01 Achieve maintenance of patient airway.
- 14.02.02 Achieve removal of bronchopulmonary secretions.

14.03 Conduct therapeutic procedures to achieve adequate spontaneous and artificial ventilation.

- 14.03.01 Instruct in proper breathing techniques.
- 14.03.02 Encourage deep breathing.
- 14.03.03 Instruct and monitor techniques of incentive spirometry.
- 14.03.04 Administer prescribed bronchodilators.
- 14.03.05 Initiate and adjust IPPB therapy.
- 14.03.06 Select appropriate ventilator.
- 14.03.07 Select appropriate tidal volume, rate, and/or minute ventilation for mechanical ventilation.
- 14.03.08 Institute and modify weaning procedures.

  - 14.03.09 Initiate and adjust continuous mechanical ventilation when settings are specified.
  - 14.03.10 Initiate and adjust IMV, SIMV, pressure support ventilation (PSV).
- 14.04 Conduct therapeutic procedures to achieve adequate arterial and tissue oxygenation.
  - 14.04.01 Position patient to minimize hypoxia.
  - 14.04.02 Administer oxygen (on or off ventilator).
  - 14.04.03 Prevent procedure-associated hypoxia (e.g. oxygenated before and after suctioning and equipment change, etc.).
  - 14.04.04 Initiate and adjust CPAP.
  - 14.04.05 Initiate and adjust PEEP therapy.
- 14.05 Evaluate and monitor patient's response to respiratory care.
  - 14.05.01 Measure and record vital signs.
  - 14.05.02 Monitor cardiac rhythm.
  - 14.05.03 Perform pulse oximetry.
  - 14.05.04 Auscultate chest and record changes.
  - 14.05.05 Observe changes in sputum production and consistency.
  - 14.05.06 Note patient's subjective response to therapy.
  - 14.05.07 Measure $^{F}1^{O}2$ and or liter flow.
  - 14.05.08 Perform spirometry/determine vital capacity.
  - 14.05.09 Perform arterial puncture.
  - 14.05.10 Interpret results of arterial blood gas analysis.
  - 14.05.11 Adjust and check alarm systems.
  - 14.05.12 Note patient's response to mechanical ventilation.
  - 14.05.13 Measure tidal volume, respiratory rate, airway pressures, I:E ratio, and maximum inspiratory pressure.
  - 14.05.14 Monitor endotracheal or tracheostomy tube cuff pressure.
- 14.06 Make necessary modifications in therapeutic procedures and recommend respiratory care plan modifications based on patient response.
  - 14.06.01 Terminate treatment based on patient's adverse reaction to therapy being administered.
  - 14.06.02 Modify bronchial hygiene.
  - 14.06.03 Modify management of artificial airways.
  - 14.06.04 Modify incentive breathing devices.
  - 14.06.05 Modify aerosol therapy.
  - 14.06.06 Modify oxygen therapy.
  - 14.06.07 Modify suctioning.
  - 14.06.08 Modify mechanical ventilation.
  - 14.06.09 Recommend modifications in the respiratory care plan based on the patient's response.
- 14.07 Initiate, conduct, or modify respiratory care techniques in an emergency setting.
  - 14.07.01 Recognize the need for emergency resuscitation.
  - 14.07.02 Call for help.
  - 14.07.03 Establish a patent airway.
  - 14.07.04 Use mouth-to-mouth, bag-mask ventilation, and/or mouth-to-valve mask ventilation.
  - 14.07.05 Perform external cardiac compression.

14.07.06 Check pulse.
14.07.07 Provide supplemental oxygen.
14.07.08 Observe chest excursion.
14.07.09 Recommend obtaining arterial blood gas sample.

15.0 MAINTAIN RECORDS AND COMMUNICATIONS--The student will be able to:

15.01 Use computer system to access and input patient data, when appropriate.
15.02 Chart on medical record; record therapy and results using conventional terminology as required by hospital policy and regulatory agencies.
15.03 Be familiar with and use departmental policy and procedure manual; actively participate in recommending updates.
15.04 Consistently display a professional and positive attitude in all communications.
15.05 Display respect for patients regardless of race, religion, color, creed, sex, age, or diagnosis.
15.06 Maintain confidentiality of all patient records and information.

16.0 DEMONSTRATE KNOWLEDGE OF EMPLOYMENT REQUIREMENTS AS A RESPIRATORY CARE PROFESSIONAL--The student will be able to:

16.01 Identify state licensure and continuing education requirements.
16.02 Discuss the Respiratory Care Act.
16.03 List the minimum competency requirements to practice in the state.

July 1997

Florida Department of Education
INTENDED OUTCOMES

Program Title: Respiratory Care Program

PSV

CIP Numbers	0317.081800
Grade Level	College
Length	Associate Degree/76 credit hours

MAJOR CONCEPTS/CONTENT: The respiratory therapist specializes in the application of scientific knowledge and theory to practical, clinical problems of respiratory care.

The respiratory therapist may be required to exercise considerable independent, clinical judgment in the respiratory care of patients under the direct or indirect supervision of a physician. Further, the therapist is capable of serving as a technical resource person to the physician with regard to current practices in respiratory care, and to the hospital staff as to effective and safe methods for administering respiratory therapy.

The respiratory therapist's scope of patient care in an institution or home environment includes, but is not limited to, quality control of all units, intermittent positive pressure breathing (IPPB); humidity/aerosol therapy; medical gas administration; broncho-pulmonary drainage; mechanical ventilation; airway management; emergency care; pulmonary function testing; cardiorespiratory rehabilitation; measurement and reporting of cardiopulmonary sampling, infection control; cardiorespiratory drug administration, physiologic monitoring, and special advanced procedures .

The standard credit hour length for this program is 76 credit hours according to Rule 6A-14.030.

INTENDED OUTCOMES:
Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (01-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.

07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

RESPIRATORY CARE TECHNICIAN (12-16)

12.0 Select, review, obtain, and interpret patient data.
13.0 Select, assemble, and check equipment for proper function, operation, and cleanliness.
14.0 Initiate, conduct and modify prescribed therapeutic procedures.
15.0 Maintain records and communications.
16.0 Demonstrate knowledge of employment requirements as a Respiratory Care Professional.

RESPIRATORY CARE (17-21)

17.0 Adapt appropriate respiratory care procedures to the home care environment.
18.0 Perform advanced respiratory care procedures.
19.0 Administer cardiorespiratory drugs.
20.0 Assist the physician with special respiratory therapy procedures.
21.0 Demonstrate leadership and supervisory skills.

July 1997

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Respiratory Care
POSTSECONDARY NUMBER: 0317.081800

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.

06.03 Obtain and maintain BLS for Healthcare Providers or higher.
06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

RESPIRATORY CARE TECHNICIAN -- Intended outcomes 12-16 are required to complete the occupational completion point of respiratory care technicians, respiratory therapy technicians (32302169).

12.0 SELECT, REVIEW, OBTAIN AND INTERPRET DATA--The student will be able to:

12.01 Review existing data in patient record, and recommend diagnostic procedures based on all available patient information.
    12.01.01 Review existing data in patient record.
    12.01.02 Recommend procedures to obtain additional data.
12.02 Collect and evaluate additional pertinent clinical information.
    12.02.01 Assess patient's overall cardiorespiratory status by inspection.
    12.02.02 Assess patient's overall cardiopulmonary status by palpation.
    12.02.03 Assess the patient's overall cardiopulmonary status by auscultation.
    12.02.04 Interview patient.
    12.02.05 Inspect chest x-ray to determine position of endotracheal or tracheostomy tube.
12.03 Perform procedures and interpret results.
    12.03.01 Perform and/or interpret results of bedside procedures.
    12.03.02 Perform and interpret results.
    12.03.03 Interpret co-oximetry results.
12.04 Determine the appropriateness of the prescribed respiratory care plan, recommend modifications where indicated, and participate in the development of the respiratory care plan.

12.04.01 Review planned therapy to establish therapeutic goals.

12.04.02 Determine appropriateness of prescribed therapy and goals for identified pathophysiological state.

12.04.03 Recommend changes in therapeutic plan (based on data) if indicated.

12.04.04 Participate in development of respiratory care plan.

13.0 SELECT, ASSEMBLE, AND CHECK EQUIPMENT FOR PROPER FUNCTION, OPERATION AND CLEANLINESS--The student will be able to:

13.01 Select and obtain equipment, and assure cleanliness of equipment appropriate to the respiratory care plan which includes the following:

a. Oxygen administration devices.
b. Humidifiers.
c. Aerosol generators.
d. Ventilators.
e. Artificial airways.
f. Suctioning devices.
g. Gas delivery, metering, and clinical analyzing devices.
h. Manometers and gauges.
I. Resuscitation devices.
j. Incentive breathing devices.
k. Patient breathing circuits.
l. Percussors and vibrators.
m. Environmental devices - aerosol (mist) tents.
n. Metered dose inhalers (MDI) and spacers.
o. Assure selected equipment cleanliness.

13.02 Assemble, check for proper function, identity malfunctions of equipment, and take action to correct malfunctions of equipment which includes the following:

a. Oxygen administration devices.
b. Humidifiers.
c. Aerosol generators.
d. Resuscitation devices.
e. Ventilators.
f. Artificial airways.
g. Gas delivery, metering and clinical analyzing devices.
h. Suctioning devices.
I. Patient breathing circuits.
j. Incentive breathing devices.
k. Environmental devices - aerosol (mist) tents.
l. Percussors and vibrators.
m. Metered dose inhalers (MDI) and spacers.
n. Manometers and gauges.

14.0 INITIATE, CONDUCT, AND MODIFY PRESCRIBED THERAPEUTIC PROCEDURES--The student will be able to:

- 14.01 Explain planned therapy and goals to patients; maintain records and communication; and protect patient from nosocomial infection.
  - 14.01.01 Explain planned therapy and goals to patient in understandable terms to achieve optimal therapeutic outcome.
  - 14.01.02 Maintain records and communication.
  - 14.01.03 Protect patient from nosocomial infection by adherence to infection control policies and procedures (universal precautions, blood and body fluid precautions, etc.).
- 14.02 Conduct therapeutic procedures to achieve maintenance of patent airway, including the care of artificial airways; and to achieve removal of bronchopulmonary secretions.
  - 14.02.01 Achieve maintenance of patient airway.
  - 14.02.02 Achieve removal of bronchopulmonary secretions.
- 14.03 Conduct therapeutic procedures to achieve adequate spontaneous and artificial ventilation.
  - 14.03.01 Instruct in proper breathing techniques.
  - 14.03.02 Encourage deep breathing.
  - 14.03.03 Instruct and monitor techniques of incentive spirometry.
  - 14.03.04 Administer prescribed bronchodilators.
  - 14.03.05 Initiate and adjust IPPB therapy.
  - 14.03.06 Select appropriate ventilator.
  - 14.03.07 Select appropriate tidal volume, rate, and/or minute ventilation for mechanical ventilation.
  - 14.03.08 Institute and modify weaning procedures.
  - 14.03.09 Initiate and adjust continuous mechanical ventilation when settings are specified.
  - 14.03.10 Initiate and adjust IMV, SIMV, pressure support ventilation (PSV).
- 14.04 Conduct therapeutic procedures to achieve adequate arterial and tissue oxygenation.
  - 14.04.01 Position patient to minimize hypoxia.
  - 14.04.02 Administer oxygen (on or off ventilator).
  - 14.04.03 Prevent procedure-associated hypoxia (e.g. oxygenated before and after suctioning and equipment change, etc.).
  - 14.04.04 Initiate and adjust CPAP.
  - 14.04.05 Initiate and adjust PEEP therapy.
- 14.05 Evaluate and monitor patient's response to respiratory care.
  - 14.05.01 Measure and record vital signs.
  - 14.05.02 Monitor cardiac rhythm.
  - 14.05.03 Perform pulse oximetry.
  - 14.05.04 Auscultate chest and record changes.
  - 14.05.05 Observe changes in sputum production and consistency.
  - 14.05.06 Note patient's subjective response to therapy.
  - 14.05.07 Measure $^{F}1^{O}2$ and or liter flow.
  - 14.05.08 Perform spirometry/determine vital capacity.

14.05.09 Perform arterial puncture.
14.05.10 Interpret results of arterial blood gas analysis.
14.05.11 Adjust and check alarm systems.
14.05.12 Note patient's response to mechanical ventilation.
14.05.13 Measure tidal volume, respiratory rate, airway pressures, I:E ratio, and maximum inspiratory pressure.
14.05.14 Mointor endotracheal or tracheostomy tube cuff pressure.

14.06 Make necessary modifications in therapeutic procedures and recommend respiratory care plan modifications based on patient response.

14.06.01 Terminate treatment based on patient's adverse reaction to therapy being administered.
14.06.02 Modify bronchial hygiene.
14.06.03 Modify management of artificial airways.
14.06.04 Modify incentive breathing devices.
14.06.05 Modify aerosol therapy.
14.06.06 Modify oxygen therapy.
14.06.07 Modify suctioning.
14.06.08 Modify mechanical ventilation.
14.06.09 Recommend modifications in the respiratory care plan based on the patient's response.

14.07 Initiate, conduct, or modify respiratory care techniques in an emergency setting.

14.07.01 Recognize the need for emergency resuscitation.
14.07.02 Call for help.
14.07.03 Establish a patent airway.
14.07.04 Use mouth-to-mouth, bag-mask ventilation, and/or mouth-to-valve mask ventilation.
14.07.05 Perform external cardiac compression.
14.07.06 Check pulse.
14.07.07 Provide supplemental oxygen.
14.07.08 Observe chest excursion.
14.07.09 Recommend obtaining arterial blood gas sample.

15.0 MAINTAIN RECORDS AND COMMUNICATIONS--The student will be able to:

15.01 Use computer system to access and input patient data, when appropriate.
15.02 Chart on medical record; record therapy and results using conventional terminology as required by hospital policy and regulatory agencies.
15.03 Be familiar with and use departmental policy and procedure manual; actively participate in recommending updates.
15.04 Consistently display a professional and positive attitude in all communications.
15.05 Display respect for patients regardless of race, religion, color, creed, sex, age, or diagnosis.

15.06 Maintain confidentiality of all patient records and information.

16.0 DEMONSTRATE KNOWLEDGE OF EMPLOYMENT REQUIREMENTS AS A RESPIRATORY CARE PROFESSIONAL--The student will be able to:

16.01 Identify state licensure and continuing education requirements.
16.02 Discuss the Respiratory Care Act.
16.03 List the minimum competency requirements to practice in the state.

RESPIRATORY CARE (17-21)

Completers are eligible to take the NBRC examination and become licensed with Agency for Health Care Administration (AHCA).

17.0 ADAPT APPROPRIATE RESPIRATORY CARE PROCEDURES TO THE HOME CARE ENVIRONMENT--The student will be able to:

17.01 Provide for 02 administration, aerosal and bronchial hygiene therapy and lung expansion therapy in the home.
17.02 Arrange for life support and monitoring (i.e mechanical ventilation, apnea monitoring, nasal CPAP) in the home.
17.03 Instruct patient, family and other health care workers on the appropriate use, operation, cleaning and maintenance of respiratory care equipment.
17.04 Perform patient monitoring and assessment in the home.
17.05 Recognize and report symptoms of abuse and neglect.

18.0 PERFORM ADVANCED RESPIRATORY CARE PROCEDURES--The student will be able to:

18.01 Assume primary clinical responsibility for all respiratory care modalities.
18.02 Check physicians orders or consult with physician.
18.03 Design and implement respiratory care plan as appropriate.
18.04 Perform pulmonary artery sampling.
18.05 Perform cardiac output procedures.
18.06 Perform arterial line set up and monitoring.
18.07 Perform transcutaneous gas monitoring.
18.08 Perform non invasive monitoring techniques as appropriate.
18.09 Perform pulseoximetry monitoring.
18.10 Perform various advanced procedures, based on local practice.
18.11 Remove, clean and replace inner canula tube nad/or replace tracheostomy tube, as ordered.
18.12 Perform various mathematical computations dealing with cardiopulmonary assessment.
18.13 Intubate infant.

18.14 Initiate infant mechanical ventilation with appropriate ventilator and parameter including CPAP and PEEP.
18.15 Extubate infant, within recommended criteria.
18.16 Monitor return to normal physiology; reventilate if necessary.
18.17 Add positive end expiratory pressure (PEEP) to ventilator circuit.
18.18 Perform extubation of adult patient.
18.19 Monitor return to normal physiology, reintubate if necessary.

19.0 ADMINISTER CARDIORESPIRATORY DRUGS--The student will be able to:

19.01 Demonstrate knowledge of drug classifications, actions and uses, route of administration and usual adult doses, mathematics needed to calculate divided or childrens dosage, contraindications, drug interactions, adverse reactions, how supplied, mixing instructions, storage, laboratory test interferences.
19.02 Recognize the critical importance of this activity and follow directions.
19.03 Verify physicians orders.
19.04 Prepare medication for administration.
19.05 Identify patient, introduce self.
19.06 Administer drug.
19.07 Document administering of drug in all appropriate records.
19.08 Recognize the symptoms of drug idiosyncracies.
19.09 Identify adverse drug reactions and take appropriate action.
19.10 Recognize anaphylactic shock.

20.0 ASSIST THE PHYSICIAN WITH SPECIAL RESPIRATORY THERAPY PROCEDURES--The student will be able to:

20.01 Assist with insertion and maintenance of an umbilical arterial and/or venous catheter.
20.02 Assist with bronchoscopy, chest tubes, cardiac catheterizations.
20.03 Assist with Swan-Ganz catherization and other invasive monitoring.
20.04 Assist with thoracentesis and tracheostomy.

21.0 DEMONSTRATE LEADERSHIP AND SUPERVISORY SKILLS--The student will be able to:

21.01 Perform evaluations of subordinate personnel, maintaining objectivity.
21.02 Make assignments to appropriate personnel within the department.
21.03 Observe employee behavior and counsel re attitudes, demeanor, appearance, protocol, interaction.
21.04 Encourage/provide continuing education activities.

21.05 Observe subordinate performing procedures, correct discrepancies.
21.06 Instruct subordinates in new procedures/new equipment.
21.07 Demonstrate knowledge of productivity and control of resources, using budgeting, inventory control, and ordering of supplies.
21.08 Recognize state-required licensure and documentation (i.e., experiential and public display).

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title:	Surgical Technology
Occupational Area:	Health Science Education
	PSAV
Program Numbers	H170211
CIP Number	0317.021100
Grade Level	30, 31
Length	1200 hours
Certification	NURSING ED @5 PRAC NURSE @7 @G OPR RM TEC @7 G REG NURSE G
Basic Skills	
Math	10
Language	11
Reading	11

I. MAJOR CONCEPTS/CONTENT: The program is designed to prepare students for employment as surgical technicians (32928225) or to provide supplemental training for persons previously or currently employed in these occupations. Selected portions of this program may be utilized to provide additional skills to enable nursing graduates to become employable in operating rooms as surgical technologists. The program should meet the requirements of the Commission on Accreditation of Allied Health Education Programs (CAAHEP)

The content includes, but is not limited to, communication and interpersonal skills, legal and ethical responsibilities, anatomy, physiology, pathophysiology, microbiology, aseptic techniques, patient care procedures, surgical technology procedures, patient safety, use and care of equipment and supplies, CPR, Heartsaver, employability skills, and basic computer literacy. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

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II. **LABORATORY ACTIVITIES**: In a simulated surgical environment, students practice preparing, setting up and maintaining a sterile field, sterilization and disinfection procedures, preparation of supplies and equipment for surgery, and patient preparation.

Clinical learning experiences in an operating room and related areas are an integral part of this program.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America, Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C. Students should be encouraged to belong to their professional association.

A low teacher-student ratio in the clinical area is strongly recommended. The recommended maximum ratio is 1:12.

After successful completion of an approved program, students are eligible to take the Association of Surgical Technologists National Certification Examination.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

In accordance with Rule 6A-10.040 FAC, the minimum basic skills grade level required for this postsecondary adult vocational program is: Mathematics 10.0, Language 11.0, and Reading 11.0. This grade level number corresponds to a grade equivalent score obtained on a state designated basic skills examination.

This program may be offered in PSAV courses. Vocational credit shall be awarded to the student on a transcript in accordance with Section 230.643 F.S.

To be transferable statewide between institutions, this program/course must have been reviewed and a "transfer value" assigned the curriculum content by the appropriate Statewide Course Numbering System discipline committee. This does not preclude institutions from developing specific program or course articulation agreements with each other.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

Equipment List: A generic equipment list is available for the program/cluster and is printed in a supplement to this document.

The typical length of this program for the average achieving student is 1200 clock hours which includes 90 clock hours for the Health Careers Core.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

SURGICAL TECHNOLOGY (12-18)

12.0 Use communication and interpersonal skills as related to surgical technology.
13.0 Demonstrate an understanding of the basic sciences related to surgical technology.

14.0 Describe and practice safety measures in the surgical environment.

15.0 Perform patient care procedures related to the surgical environment and describe methods for meeting patients' needs.

16.0 Demonstrate knowledge of the skills necessary to function safely and effectively.

17.0 Demonstrate knowledge of and assist with surgical procedures.

18.0 Demonstrate an understanding of legal and ethical responsibilities specific to surgical technology.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Surgical Technology
POSTSECONDARY NUMBER: H170211

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of the health care occupation.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights."
03.04 Describe a Code of Ethics consistent with the health care occupation.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.
06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

SURGICAL TECHNOLOGY--Students completing intended outcomes 12-18 will meet the qualifications of the occupational completion point as Surgical Technicians. After successful completion of an approved program, students are eligible to take the Association of Surgical Technologists National Certification Examination.

12.0 USE COMMUNICATION AND INTERPERSONAL SKILLS AS RELATED TO SURGICAL TECHNOLOGY--The student will be able to:

12.01 Use various forms of communication in the role of surgical technician.
12.02 Maintain current documentation in the clinical setting.
12.03 Demonstrate proper use of the intercom.

13.0 DEMONSTRATE AN UNDERSTANDING OF THE BASIC SCIENCES RELATED TO SURGICAL TECHNOLOGY--The student will be able to:

13.01 Explain microbiology and its relationship to the surgical environment.
13.02 Relate anatomy and physiology to surgical procedures.
13.03 Apply the principles of medical/surgical asepsis to surgery.
13.04 Apply infection control techniques following Center for Disease Control (CDC) guidelines for surgery

14.0 DESCRIBE AND PRACTICE SAFETY MEASURES IN THE SURGICAL ENVIRONMENT--The student will be able to:

14.01 Inspect emergency equipment and supplies for condition and quantity.
14.02 Check electrical equipment in the operating room.
14.03 Identify appropriate safety measures for laser surgery.

15.0 PERFORM PATIENT CARE PROCEDURES RELATED TO THE SURGICAL ENVIRONMENT AND DESCRIBE METHODS FOR MEETING PATIENT'S NEEDS--The student will be able to:

15.01 Perform patient transfer/transportation techniques used in the operating room.
15.02 Assist with positioning and restraining patient for surgery.
15.03 Ground patient and connect electro surgical cautery unit.
15.04 Identify the roles of anesthetist and circulating nurse during induction.

15.05 Prepare operative site.
15.06 Identify steps for foley catheter insertion and connecting to drainage.
15.07 Assist in applying sterile dressing and bandage.

16.0 DEMONSTRATE KNOWLEDGE OF THE SKILLS NECESSARY TO FUNCTION SAFELY AND EFFECTIVELY--The student will be able to:

16.01 Select instruments, equipment and supplies for surgical procedures using surgeon preference/procedure cards.
16.02 Measure and pour sterile solutions.
16.03 Perform surgical scrub.
16.04 Put on sterile gown and gloves.
16.05 Drape tables and solution stands.
16.06 Set up sterile mayo stand and instrument table.
16.07 Prepare sutures, ligatures, ties.
16.08 Assist surgeon in gowning and gloving.
16.09 Assist in draping patient, pass instruments, monitor field.
16.10 Identify/correct and/or report breaks in aseptic technique.
16.11 Monitor body fluids, e.g. blood loss, ascites.
16.12 Perform complete counts with R.N..
16.13 Identify principles and demonstrate techniques of disinfection and sterilization.
16.14 Assist in removing/applying cast.
16.15 Prepare specimen for laboratory analysis.
16.16 Decontaminate instruments equipment and environment.
16.17 Replenish supplies and equipment.
16.18 Prepare and/or update procedure cards.

17.0 DEMONSTRATE KNOWLEDGE OF AND ASSIST WITH SURGICAL PROCEDURES--The student will be able to:

17.01 Identify preoperative diagnosis, common complications, operative pathology relating to specific surgical procedures.
17.02 List and describe types of incisions and wound closures.
17.03 Identify instruments, equipment and supplies for any surgical procedure.

18.0 DEMONSTRATE AN UNDERSTANDING OF LEGAL AND ETHICAL RESPONSIBILITIES SPECIFIC TO SURGICAL TECHNOLOGY--The student will be able to:

18.01 State methods, standards and aids that assist a surgical technologist with interpreting and following legal responsibilities.
18.02 Explain the job requirements.
18.03 Provide health care within the ethical/legal framework of the job description.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Unit Treatment and Rehabilitation
Occupational Area: Health Science Education

PSVC

CIP Number 0317.040500
Grade Level College Credit
Length 300 clock hours
Certificate

I. **MAJOR CONCEPTS/CONTENT**: The program is designed to prepare students for employment as psychiatric aides, case aides (195.367-010), unit treatment and rehabilitation specialists, or asylum attendants or to provide supplemental training for persons previously or currently employed in these occupations.

The content includes, but is not limited to, concepts of mental health and mental illness; treatment plans and activities designed to stabilize, reorient, and rehabilitate mentally ill and emotionally disturbed patients; techniques of administration of prepackaged medication; observation of patients for changes in vital signs and behavior patterns; assisting patients in activities of daily living; supervising individual patients and patient teams; leadership and human relations; CPR, health, safety, and employability skills. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory activities and clinical experiences are essential to this program.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes.

Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The typical length of this program for the average achieving student is 300 hours with a college credit certificate.

IV. INTENDED OUTCOMES:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.

06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

UNIT TREATMENT AND REHABILITATION SPECIALIST (12-18)

12.0 Participate in a variety of treatment and rehabilitation activities designed to stabilize, reorient, and rehabilitate mentally ill and emotionally disturbed patients.
13.0 Assist treatment and rehabilitation personnel in carrying out prescribed functions of specialized rehabilitation programs centered around personal and social adjustment, i.e., self-help, personal hygiene, and daily living.
14.0 Participate in group therapy sessions with professionals and observe patients for changes in behavior patterns.
15.0 Take patients vitals and assist patient with daily personal care activities.
16.0 Prepare reports, assimilate data and recommend changes in policies, procedures, or techniques as a member of the treatment and rehabilitation team.
17.0 Supervise individual patients and patient teams in the routine daily living activities of the treatment and rehabilitation unit.
18.0 Perform pharmacological aspects of care as directed.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Unit Treatment And Rehabilitation
POSTSECONDARY NUMBER: 0317.040500

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

- 03.01 Discuss the legal framework of the health care occupation.
- 03.02 Explain the medical liability of health care workers.
- 03.03 Explain the patients' "Bill of Rights."
- 03.04 Describe a Code of Ethics consistent with the health care occupation.
- 03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
- 03.06 Recognize the limits of authority and responsibility of health care workers.
- 03.07 Recognize and report illegal and unethical practices of health care workers.
- 03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

- 04.01 Develop a basic understanding of the structure and function of the body systems.
- 04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
- 04.03 Identify psychological reactions to illness including defense mechanisms.
- 04.04 Recognize the steps in the grief process.
- 04.05 Explain basic concepts of positive self image, wellness and stress.
- 04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
- 04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

- 05.01 Demonstrate the safe use of medical equipment.
- 05.02 Recognize and report safety hazards.
- 05.03 Identify and practice security procedures for medical supplies and equipment.
- 05.04 Demonstrate proper body mechanics.
- 05.05 Demonstrate the procedure for properly identifying patients.
- 05.06 Demonstrate procedures for the safe transport and transfer of patients.
- 05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

- 06.01 Monitor and record vital signs.
- 06.02 Describe legal parameters relating to the administration of emergency care.
- 06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.
10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.
11.09 Calculate ratios.

UNIT TREATMENT AND REHABILITATION - Students completing this module have met the requirements for the occupational exit of Unit Treatment and Rehabilitation Specialist, psychiatric aides, or case aides (195.367-010).

12.0 PARTICIPATE IN A VARIETY OF TREATMENT AND REHABILITATION ACTIVITIES DESIGNED TO STABILIZE, REORIENT, AND REHABILITATE MENTALLY-ILL AND EMOTIONALLY DISTURBED PATIENTS--The student will be able to:

12.01 Describe agency and programs.
12.02 Identify and record maladaptive behaviors.
12.03 Initiate effective relationships with clients.
12.04 Negotiate a reward system with client.
12.05 Identify legal considerations.
12.06 Reduce client anxiety.
12.07 Identify client's problem by interpreting test results and soliciting information from other agencies within constraints of applicable confidentiality policies and laws.
12.08 Observe clients to prevent regression.
12.09 Perform reality testing.

13.0 ASSIST TREATMENT AND REHABILITATION PERSONNEL IN CARRYING OUT PRESCRIBED FUNCTIONS OF SPECIALIZED REHABILITATION PROGRAMS CENTERED AROUND PERSONAL AND SOCIAL ADJUSTMENT, I.E., SELF-HELP, PERSONAL HYGIENE, AND DAILY LIVING--The student will be able to:

13.01 Obtain relevant information from client using interview techniques.
13.02 Explain client's rights.
13.03 Obtain client's signature if needed.
13.04 Shape client's behavior to substitute appropriate for maladaptive behavior.
13.05 Explain anticipated events related to treatment plan.
13.06 Obtain client's specific agreement and commitment to an agreed upon treatment plan.
13.07 Verify client's understanding of treatment plan contract.
13.08 Assist with explanation and interpretation of treatment plan to family.
13.09 Teach client personal self-help and living skills to develop an independent self-care program.

13.10 Identify and teach client at risk behavior which promotes the spread of AIDS.
13.11 Identify specific goals and objectives for client.
13.12 Direct communication to client capabilities.
13.13 Plan learning tasks in increments appropriate to client's level of functioning.
13.14 Utilize effective reinforcement techniques.
13.15 Recognize, report/record indications of delirium tremens, hallucinations, confusional states or changes in emotion.
13.16 Recognize and report symptoms of abuse and neglect.
13.17 Encourage client compliance with routines.
13.18 Acquire assistance in interpreting as needed.

14.0 PARTICIPATE IN GROUP THERAPY SESSIONS WITH PROFESSIONALS AND OBSERVES PATIENTS FOR CHANGES IN BEHAVIOR PATTERNS--The student will be able to:

14.01 "Read" and respond to "feeling tones" of client.
14.02 Conduct an activity program planned around the specific needs and interests of clients and their physical/emotional capabilities and limitations.
14.03 Assure client safety while encouraging and supporting their participation in activity.
14.04 Analyze critical incidents.
14.05 Empathize with and reassure client.
14.06 Lead, co-lead and/or participate in group therapy sessions.
14.07 Enhance socialization and interaction of clients.
14.08 Foster and sustain trust building relationship.
14.09 Foster involvement of all group members.
14.10 Draw out client feelings that encourage the release of tension and anxieties (catharsis).
14.11 Reduce excessive group pressure on a client.
14.12 Evaluate group session.
14.13 Protect client's right to privacy and confidentiality.
14.14 Adhere to organization policy in dealing with critical incident.

15.0 TAKE PATIENTS VITALS AND ASSIST PATIENT WITH DAILY PERSONAL CARE ACTIVITIES--The student will be able to:

15.01 Monitor, record, report vital signs.
15.02 Supervise client feeding, bathing and grooming.
15.03 Monitor urine and bowel habits.

16.0 PREPARE REPORTS, ASSIMILATE DATA AND RECOMMEND CHANGES IN POLICIES, PROCEDURES, OR TECHNIQUES AS A MEMBER OF THE TREATMENT AND REHABILITATION TEAM--The student will be able to:

16.01 Determine appropriate treatment needs.
16.02 Record and review data with client to assure accuracy.
16.03 Prepare report for supervisor.
16.04 Record client's progress.
16.05 Initiate revision to treatment plan if needed.
16.06 Participate in planning and developing policies and procedures for a treatment program.

16.07 Identify treatment program characteristics.
16.08 Assist with identification of necessary budgeting, staffing, equipment, supplies, and physical plant resources.
16.09 Collect and compile information to insure completeness of therapeutic treatment plan.
16.10 Refer clients to another treatment service.
16.11 Assist with establishment of client/family responsibility in the referral process.
16.12 Contact receiving agency to determine availability of service and provide necessary information.
16.13 Participate in follow-up plan.
16.14 Participate in team review (evaluation) of treatment plans.
16.15 Propose treat goals or therapeutic interventions.
16.16 Participate in decision making.
16.17 Record information in written form.
16.18 Obtain information from recorded materials.

17.0 SUPERVISE INDIVIDUAL PATIENTS AND PATIENT TEAMS IN THE ROUTINE DAILY LIVING ACTIVITIES OF THE TREATMENT AND REHABILITATION UNIT--The student will be able to:

17.01 Use language and expressions that client can understand.
17.02 Maintain attentive behavior.
17.03 Control violent behavior.
17.04 Schedule and supervise client's work assignment.
17.05 Escort clients when necessary.
17.06 Facilitate reality-based feedback to clients.

18.0 PERFORM PHARMACOLOGICAL ASPECTS OF CARE AS DIRECTED--The student will be able to:

18.01 Observe and report side effects of medication.
18.02 Administer prepackaged medication.
18.03 Motivate client to take prescribed medication.
18.04 Assemble information about properties of medications being administered, their potential side effects, and client's rights relating to taking or refusing medication.
18.05 Determine client's medication history from records or family in re-allergic reactions.
18.06 Assure adequate supply and safeguard storage of medications to prevent overdose.
18.07 Assume responsibility for information transfer to/from oncoming shift.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Veterinary Technology
Occupational Area: Health Science Education

PSV

CIP Number 0317.051200
Grade Level College Credits
Length AS Degree/73 credit hours

I. **MAJOR CONCEPTS/CONTENT**: This program is designed to prepare students for employment as veterinary technicians and veterinary technologists (32951000), or animal caretakers, except farmers (79017502) animal health technicians, or animal laboratory technicians. They assist veterinarians in the medical care of animals, and typically supervise animal attendants, ward attendants, animal handlers, veterinary assistants and other employees of veterinarians. A clear distinction needs to be made between graduates of a two year A.S. degree program (veterinary technicians), and veterinary assistants who learn on the job or possess certificates. The program should meet the requirements of the Committee on Veterinary Technician Education and Activities (CVTEA).

The content includes, but is not limited to, animal office procedure; animal pharmacy and pharmacology; animal examination room/area; animal surgical preparation and assisting; large and small animal nursing; laboratory animal procedures; animal radiology, and employability skills. The curriculum also includes general course material such as computer literacy and use, applied mathematics, biological science, communications skills, fundamentals of microbiology, and humanities or liberal arts. Applicants for the certification examination given by the Florida Veterinary Medical Association must be graduates of approved two-year programs. Program approval is defined as being approved by the Committee on Veterinary Technician Education and Activities (CVTEA).

The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Laboratory activities are essential to the program. Instructional emphasis is placed on laboratory diagnostic techniques and methods utilized in hematology, blood coagulation, blood chemistry, liver-kidney-pancreatic function tests, body fluid examinations and parasitology.

III. **SPECIAL NOTE**: The Health Occupations Students of America (HOSA), Inc., is the appropriate vocational student organization for providing leadership training experiences and reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C. Students are encouraged to become members of their professional organization. Other appropriate organizations include North American Veterinary Technician Association and the Florida Association of Veterinary Medical Technicians.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 73 credit hours according to Rule 6A-14.030.

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.
04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.

07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

VETERINARY TECHNICIAN (12-29)

12.0 Perform office procedures utilized in the management of a veterinary office.
13.0 Demonstrate an understanding of animal pharmacology by the proper handling and use of related drugs.
14.0 Perform under supervision, physical examinations, and laboratory procedures.
15.0 Assist with routine surgical and obstetrical procedures.
16.0 Prepare animals for surgical procedures.
17.0 Assist with anesthesia under supervision.
18.0 Perform surgical clean-up.
19.0 Perform large and small animal nursing techniques.
20.0 Perform urinalysis laboratory procedures.
21.0 Perform hematology laboratory procedures.
22.0 Perform parasitology laboratory procedures.
23.0 Perform microbiology laboratory procedures.
24.0 Perform necropsy laboratory procedures.
25.0 Perform cytology laboratory procedures.
26.0 Perform veterinary radiographic procedures.
27.0 Demonstrate research techniques on laboratory animals.
28.0 Apply knowledge of hospital management and equipment standards.
29.0 Apply knowledge of professional ethics, jurisprudence and professionalism.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Veterinary Technology

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
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02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.

06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.
06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.
07.02 Demonstrate knowledge of surgical asepsis.
07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.
08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.
09.02 Secure information about a job.
09.03 Identify documents that may be required when applying for a job.
09.04 Complete a job application form correctly.
09.05 Demonstrate competence in job interview techniques.
09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.
09.07 Identify acceptable work habits.
09.08 Demonstrate knowledge of how to make job changes appropriately.
09.09 Demonstrate desirable health habits.
09.10 Recognize appropriate affective/professional behavior.
09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.
10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.
10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.
10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

VETERINARY TECHNICIAN: Students completing intended outcomes 12-29 have met the requirements for the occupational completion point of veterinary technicians and veterinary technologists (32951000), or animal caretakers, except farmers (79017502) animal health technicians, or animal laboratory technicians. Applicants for the certification examination given by the Florida Veterinary Medical Association must be graduates of an approved two-year program.

12.0 PERFORM OFFICE PROCEDURES UTILIZED IN THE MANAGEMENT OF A VETERINARY OFFICE--The student will be able to:

12.01 Make appointments.
12.02 List and describe appropriate information on state/federal health regulations and prepare health and vaccination certificated for signatures.
12.03 Admit patients, take history, and maintain records.
12.04 Demonstrate basic filing of X-Rays, lab reports, etc.
12.05 Demonstrate client and public relations in the reception, discharge and educating of clients.
12.06 Demonstrate knowledge of ethics and jurisprudence as related to veterinary technology.
12.07 Demonstrate knowledge of First-Aid and CPR as they relate to animal care.
12.08 Identify documentation procedures for responding to veterinarian medical emergencies.
12.09 Practice basic cleanliness and orderliness in relationship to the on-going activity of a veterinary facility (including hospital, clinic, center, practice, laboratory, etc.).

12.10 Demonstrate the knowledge of the technician's role in generation of veterinary practice income.
12.11 Demonstrate basic bookkeeping.
12.12 Demonstrate business letter and report writing.
12.13 Use a computer to perform simple word processing for veterinary office billing and recordkeeping.

13.0 DEMONSTRATE AN UNDERSTANDING OF ANIMAL PHARMACOLOGY BY THE PROPER HANDLING AND USE OF RELATED DRUGS--The student will be able to:

13.01 Identify and discuss general types and groups of drugs.
13.02 Label and package dispensed drugs correctly.
13.03 Read and fill prescriptions.
13.05 Calculate dosages.
13.06 Store and handle biologic and therapeutic agents appropriately.
13.07 Identify controlled substances and identify controlled handling.
13.08 Diagram and describe inventory control.
13.09 Prepare medications.
13.10 Discuss the signs of adverse drug reactions.
13.11 Use and explain appropriate routes and methods of drug administration.

14.0 PERFORM UNDER SUPERVISION, PHYSICAL EXAMINATIONS, AND LABORATORY PROCEDURES--The student will be able to:

14.01 List "normal" temperature, pulse and respiration in all common species.
14.02 Use proper medical terminology in oral and written communications as related to veterinary technology.
14.03 Perform under supervision and explain to clients immunizations, procedure, types, and schedules.
14.04 Identify common breeds of large, small and laboratory animals.
14.05 Restrain patients by: removing from and placement in restraint of small and laboratory animals in/on cages/tables; haltering horses and cattle, basic rope usage and knot tying, application of nose tongs, twitch, hog holder, Elizabethan collar, dog safety muzzle, sheep restraint, bovine tail restraint, hose leg restraint, restraint of birds and operation of cattle chute.
14.06 Identify heart and lung sounds with stethoscope.
14.07 Explain routine hospital procedures (e.g. surgeries, dental work, worming, patient care, etc.).
14.08 Explain and use knowledge of general nutritional requirements and practical approach to feeding common species.
14.09 Collect blood, skin scrapings, administer specific drugs under supervision of veterinarian.
14.10 Obtain and record patient history.
14.11 Describe training of companion animals and correction of behavior problems.

14.12 Identify common grains, grass, hay.
14.13 Identify common poisonous plants.

15.0 ASSIST WITH ROUTINE SURGICAL AND OBSTETRICAL PROCEDURES--The student will be able to:

- 15.01 Describe and identify knowledge of the following routine surgical procedures:
  - 15.01.01 ovariohysterectomy - dogs and cats
  - 15.01.02 Caesarian section - all common species
  - 15.01.03 orthopedic procedures
  - 15.01.04 castration - all common species
  - 15.01.05 tail docking- pups and lambs
  - 15.01.06 laparotomies- all common species
  - 15.01.07 dystocias in common species - recognition of obstetrical equipment
  - 15.01.08 dehorning - cattle and goats
  - 15.01.09 prolapse - common species and incidence
- 15.02 Describe and demonstrate knowledge to assist in the artificial insemination techniques and equipment in various species and discuss pregnancy examination.

16.0 PREPARE ANIMALS FOR SURGICAL PROCEDURES--The student will be able to:

- 16.01 Prepare surgical sites - aseptic techniques.
- 16.02 Clean surgical instruments.
- 16.03 Prepare sterile surgical packs.
- 16.04 Prepare and use gowns, masks, gloves, and drapes.
- 16.05 Sterilize instruments and supplies using steam and cold methods.
- 16.06 Identify instruments.
- 16.07 Operate and maintain autoclaves.
- 16.08 Sanitize operating room and care for used equipment.
- 16.09 Identify and use common suture materials, types, etc.
- 16.10 Position patients for common procedures.
- 16.11 Arrange lighting during surgery.
- 16.12 Demonstrate knowledge of gas sterilization of instruments and supplies.

17.0 ASSIST WITH ANESTHESIA UNDER SUPERVISION--The student will be able to:

- 17.01 List and describe the pre-operative medications, local anesthesia, regional anesthesia and general anesthesia, including species variation and types of IV anesthesia, inhalant anesthesia (methoxy-flurane, halothane, nitrous oxide), induction, and those requiring the use of endotracheal tube suplus, equipment types and operation, chemical restraints and muscle relaxants.
  - 17.01.01 Anesthetic monitoring:
    - 17.01.01.01 use of esophageal stethoscope
    - 17.01.01.02 EKG usage and audible monitoring

17.01.01.03 stages and planes of anesthesia - recognition of clinical signs of stages and planes and understanding of significance of stages and planes.

17.01.02 Recognition of anesthetic emergencies requiring resuscitation, respirators and describe anesthetic antagonists and their use.

17.01.03 Monitoring and care during anesthetic recovery

17.01.04 Care and maintenance of anesthetic machine

17.01.05 Waste anesthetic gas disposal and knowledge of human toxicity

17.02 Assist surgically with instrument handling, maintenance of asepsis, care of exposed tissues and organs, obstetrical assistance and operative records.

18.0 PERFORM SURGICAL CLEAN-UP--The student will be able to:

18.01 Describe and perform surgical clean-up including equipment, surgical room or area, instruments, patient, personnel and proper disposal of waste and tissue.

19.0 PERFORM LARGE AND SMALL ANIMAL NURSING TECHNIQUES--The student will be able to:

19.01 Demonstrate injection techniques including intravenous, subcutaneous, intramuscular, intradermal, intraperitoneal and sublingual.

19.02 Demonstrate intravenous catheterization including the jugular vein and cephalic and saphenous vein (small animals).

19.03 Maintain fluid therapy (maintain catheter placement, determining and maintaining correct rate).

19.04 Describe and perform pre and post-operative patient care.

19.05 Administer oral medication by means of dose syringe, balling gun, oral speculum, hand pilling - small animals and gastric lavage - small animals.

19.06 Demonstrate bandaging techniques.

19.07 Apply and remove casts and splints.

19.08 Perform suture removal.

19.09 Apply emergency splint application.

19.10 Perform dental prophylaxis, using hand and machine techniques.

19.11 Perform therapeutic bathing, grooming, and dipping of small animals.

19.12 Demonstrate routine recordkeeping, care, and observation of hospitalized patients.

19.13 Practice stomach tubing of dogs, cats, cattle and sheep.

19.14 Describe and perform intramammary treatment (mastitis therapy only).

19.15 Implement patient and personnel safety measures.

19.16 Describe and perform orphan animal care of small,large and exotic animals.
19.17 Feed preparation and prescription diets to animals.
19.18 Clean and care for cages, kennels, and stalls.
19.19 Practice nail trimming for dogs, cats, and birds, and beak-trimming for birds.
19.20 Practice equine leg and tail wraps.
19.21 Express canine anal sacs.
19.22 Practice blood collection and transfusion.
19.23 Practice ear cleaning and dressing.
19.24 Demonstrate enema administration.
19.25 Demonstrate catheterization of urinary tract of canine, feline and large animals.
19.26 Take and examine skin scrapings.
19.27 Demonstrate emergency care of trauma patients.
19.28 Clean, prep, and medicate wounds or abscesses.
19.29 Apply topical medication to the eye.
19.30 Describe and perform nursing care of newborns.
19.31 Care and repair equipment.
19.32 Prepare for equine vaginal examination and cervical culture.
19.33 Demonstrate bovine mastitis testing.
19.34 Demonstrate bovine, equine, ovine, and porcine hoof trimming.
19.35 Mark and tattoo animals (sites and purposes).
19.36 Practice physical therapy.
19.37 Demonstrate sheath cleaning-equine.

20.0 PERFORM URINALYSIS LABORATORY PROCEDURES--The student will be able to:

20.01 Perform and demonstrate skill in the following: Urinalysis, sample collection, physical properties, color, clarity, specific gravity including urometer, refractometer and chemical properties, dipstick and tablet tests,, microscopic sediment exam and chemical evaluation of calculi.

21.0 PERFORM HEMATOLOGY LABORATORY PROCEDURES--The student will be able to:

21.01 Perform and demonstrate skill in the following: Hematology:
- 21.01.01 Sample Collection procedures of all types
- 21.01.02 CBC
  - 21.01.02.01 hemoglobin
  - 21.01.02.02 hematocrit
  - 21.01.02.03 sedimentation rate
  - 21.01.02.04 total protein (refractometer)
  - 21.01.02.05 white cell count
    - glass pipette
    - unopette
    - automatic cell counter
  - 21.01.02.06 red cell count

- glass pipette
- unopette
- automatic cell counter

21.01.02.07 microscopic exam
- preparation of blood film
- staining with a variety of Romanowsky like stain
- leukocyte differential - normal/abnormal
- RBC morphology evaluation - normal/abnorma
- platelet estimation
- calculation of absolute value
- white blood cell correction for nucleated red cells

21.01.03 Reticulocyte count
21.01.04 Platelet count
21.01.05 Total eosinophil count
21.01.06 Blood parasite identification
21.01.06.01 dirofilaria sp
- direct blood exam
- hematocrit tube method
- knotts test
- filter test
- heartworm kit

21.01.06.02 anaplasma sp
21.01.06.03 babesia sp
21.01.06.04 trypanosoma sp
21.01.06.05 eperythrozoan sp
21.01.07 Coagulation to include knowledge of clotting principles, knowledge of one-step prothrombin time, knowledge of partial thromboplastin time and knowledge of fibrinogen assay.
21.01.08 Chemistries
21.01.08.01 use of various types of instruments
21.01.08.02 perform common tests (BUN, glucose, common enzymes, etc.)
21.01.08.03 pregnancy tests (MIP tests)
21.01.08.04 theory of colorimetry and photometry
21.01.08.05 Serology - perform various types of slide/card agglutinations
21.01.08.06 cross matching
21.01.08.07 Coombs' test
21.01.08.08 canine brucellosis

22.0 PERFORM PARASITOLOGY LABORATORY PROCEDURES--The student will be able to:

22.01 Perform and demonstrate skill in the following: Parasitology:
22.01.01 Sample collection
22.01.02 External parasites

22.01.02.01 sample preparation

22.01.02.02 identification of common ecotoparasites
- mites
- lice
- ticks

22.01.02.03 Internal parasites
1. fecal floatation techniques
2. identification of parasites and their ova
   - nematodes
   - trematodes
   - cestodes
   - flukes
3. knowledge of parasite life cycles

22.02 Perform and demonstrate skill in coprology, occult blood and Fecal fat, trypsin.

23.0 PERFORM MICROBIOLOGY LABORATORY PROCEDURES--The student will be able to:

23.01 Perform and demonstrate skill in the following: Microbiology:

23.01.01 Sample collection

23.01.02 Bacteriology to include culture and sensitivity, identification of common bacteria, common biological tests and staining procedures.

23.01.03 Mycology to include fungal culture and wet mount and identification of common fungi.

23.01.04 Virology to include principles of sampling and testing

23.01.05 Principles of immunology

24.0 PERFORM NECROPSY LABORATORY PROCEDURES--The student will be able to:

24.01 Perform and demonstrate skill in necropsy procedures such as sample collection, storage and shipment, disposal of dead animals, Euthanasia procedures and handling of rabies suspects.

25.0 PERFORM CYTOLOGY LABORATORY PROCEDURES--The student will be able to:

25.01 Perform and demonstrate skill in the following: Cytology:

25.01.01 Sample collection techniques for cytologic specimens to include color and clarity before and after centrifugation, specific gravity, total protein, white cell count, smear preparation and staining procedure and basic cell identification (normal and common abnormals).

25.01.02 Joint fluids to include color and clarity before and after centrifugation, specific gravity, total protein, viscosity, mucin precipitate test, white cell count (WBC pipette and saline diluent only), smear preparation and staining procedure and basic cell identification (normal and common abnormals).

25.01.03 Cerebrospinal fluids to include color and clarity before and after centrifugation, specific gravity, quantitative protein, red and white cell count, smear preparation and staining procedures, and basic cell identification (normal and common abnormals).

25.01.04 Airway washings (tracheal washes, nasal flushes, etc.)

- 25.01.04.01 smear preparation and staining procedures
- 25.01.04.02 basic cell identification (normal and abnormals)

25.01.05 Tissue aspirates and impressions

- 25.01.05.01 smear preparation and staining procedures
- 25.01.05.02 basic cell identification (normal and common abnormals)

25.01.06 Bone marrows to include smear preparation and staining procedure, basic cell identification (normal and common abnormals) and M/E ratio.

25.01.07 Vaginal smears to include slide preparation and staining procedures, basic cell identification (normal and common abnormals) and knowledge of estrous cycle.

25.01.08 Semen evaluation to include collection techniques, slide preparation and staining procedures, sperm count, and identification of abnormal sperm types.

25.02 Perform and demonstrate skill in the following miscellaneous laboratory procedures, such as preparation, preservation, and shipment of laboratory samples, care and maintenance of laboratory equipment, quality control (normal and abnormal controls), initiation and maintenance of laboratory records, basic principles of laboratory safety and preparation of common reagents.

26.0 PERFORM VETERINARY RADIOGRAPHIC PROCEDURES--The student will be able to:

26.01 Perform and demonstrate the following radiographic procedures:

- 26.01.01 Implement safety measures
- 26.01.02 Prepare and use technique charts

26.01.03 Take and process diagnostic radiographs including small, large and laboratory or exotic animal positioning and techniques.

26.01.04 Use darkroom procedures including hand processing and automatic processing.

26.01.05 Replace or replenish developer and fixer.

26.01.06 Demonstrate film labeling, filing, and storage.

26.01.07 Maintain radiographic quality control.

26.01.08 Maintain equipment including hanging or storage of gloves or aprons, cleaning screens, detecting or suspecting faulty equipment operation.

26.01.09 Proper use of both stationary and portable x-ray machines.

26.01.10 Perform special radiographic techniques (including contrast media studies).

27.0 DEMONSTRATE RESEARCH TECHNIQUES ON LABORATORY ANIMALS--The student will be able to:

27.01 Explain basic principles of research, and necessity for use of laboratory animals.

27.02 Identify and restrain common species of small laboratory animals.

27.03 Determine sex of laboratory animals.

27.04 Perform and/or supervise basic animal care procedure, e.g. feeding, watering, breeding, identification, and handling.

27.05 Administer or inject drugs or medicaments using appropriate sites and routes.

27.06 Collect body tissues or fluids.

27.07 Demonstrate knowledge of gnotobiotic techniques.

27.08 Perform oral dosing (intubation, blunt needle, stomach tube)

27.09 Anesthetize laboratory animals.

27.10 Identify common disease signs of laboratory animals.

27.11 Identify species of non-human primates.

28.0 APPLY KNOWLEDGE OF HOSPITAL MANAGEMENT AND EQUIPMENT STANDARDS--The student will be able to:

28.01 Demonstrate knowledge of the principles of infection control, cross contamination, and zoonoses.

28.02 Maintain inventory of supplies, medications and disposables.

28.03 Demonstrate knowledge of personnel management, assignments.

28.04 Determine personnel needs on each shift.

28.05 Perform routine maintenance checks and monitor equipment use.

28.06 Describe risk management techniques.

29.0 APPLY KNOWLEDGE OF PROFESSIONAL ETHICS, JURISPRUDENCE AND PROFESSIONALISM--The student will be able to:

29.0 APPLY KNOWLEDGE OF PROFESSIONAL ETHICS, JURISPRUDENCE AND PROFESSIONALISM--The student will be able to:

29.01 List the benefits of belonging to a professional organization of animal techniques.
29.02 Describe the technician/veterinarian relationship.

July 1997

Florida Department of Education
CURRICULUM FRAMEWORK

Program Title: Vision Care Technology/Opticianry
Occupational Area: Health Science Education

PSV

CIP Number 0317.070500
Grade Level College Credits
Length AS Degree/72 credit hours

I. **MAJOR CONCEPTS/CONTENT**: The purpose of this program is to prepare students for employment as dispensing optician apprentices, or optometicians, opticians: dispensing and measuring (32514220) or to provide supplemental training for persons previously or currently employed in these occupations.

The program prepares students to perform a variety of vision care procedures or to specialize in a particular area of vision care under the supervision of an optometrist or ophthalmologist.

Reinforcement of basic skills in English, mathematics, and science appropriate for the job preparatory programs occurs through vocational classroom instruction and applied laboratory procedures or practice.

The content includes, but is not limited to, general studies, basic sciences, optometric sciences, ophthalmic clinical techniques, ophthalmic dispensing and office management. The Health Careers Core must be taken by all students (secondary, postsecondary adult and postsecondary vocational) planning to complete any Health Occupations program. Once successfully completed, the core does not need to be repeated at any instructional level.

This program focuses on broad, transferable skills and stresses understanding and demonstration of the following elements of the health care industry; planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues and health, safety, and environmental issues.

II. **LABORATORY ACTIVITIES**: Simulation and clinical laboratory experiences are integrated with the didactic portion of this program.

III. **SPECIAL NOTE**: This program meets the Department of Health and Rehabilitative Services (HRS) HIV/AIDS education requirements as specified in Section 381.0034, Florida Statutes and the Department of Business and Professional Regulation (DBPR) HIV/AIDS education requirements as specified in Section 455.2226, Florida Statutes. Upon completion of this program, the instructor will provide a certificate to the student verifying that the HIV/AIDS requirements have been met.

Paraoptometric Section of the American Optometric Association is an appropriate vocational student organization for providing leadership training experience and for reinforcing specific vocational skills. Vocational student organizations, when provided, shall be an integral part of the vocational instructional program, and the activities of such organizations are defined as part of the curriculum in accordance with Rule 6A-6.064, F.A.C.

The program should be accredited by the Council on Optometric Education and students should be prepared to take the certification examination offered by the National Paraoptometric Registry of the American Optometric Association.

The cooperative method of instruction is appropriate for this program. When the cooperative method is offered, the following is required for each student: a training plan signed by the student, instructor and employer which includes instructional objectives and a list of on-the-job and in-school learning experiences; a work station which reflects equipment, skills, and tasks which are relevant to the occupations which the student has chosen as a career goal. Students must receive compensation for work performed.

SCANS Competencies: Instructional strategies for this program must include methods that require students to identify, organize, and use resources appropriately; to work with each other cooperatively and productively; to acquire and use information; to understand social, organizational, and technological systems; and to work with a variety of tools and equipment. Instructional strategies must also incorporate the methods to improve students' personal qualities and higher-order thinking skills.

The standard credit hour length for this program is 72 credit hours according to Rule 6A-14.030.

IV. **INTENDED OUTCOMES**:

Outcomes 01-11 are referred to as the Health Careers Core and do not have to be completed if the student has previously completed the Core in another health science program. After successfully completing the core curriculum of this program, the student will be able to:

HEALTH CAREERS CORE (1-11)

01.0 Demonstrate knowledge of the health care delivery system and health occupations.
02.0 Demonstrate the ability to communicate and use interpersonal skills effectively.
03.0 Demonstrate legal and ethical responsibilities.

04.0 Demonstrate an understanding of and apply wellness and disease concepts.
05.0 Recognize and practice safety and security procedures.
06.0 Recognize and respond to emergency situations.
07.0 Recognize and practice infection control procedures.
08.0 Demonstrate computer literacy.
09.0 Demonstrate employability skills.
10.0 Demonstrate knowledge of blood borne diseases, including AIDS.
11.0 Apply basic math and science skills.

OPTICIANRY (12-20)

12.0 Apply knowledge of anatomy and physiology of the eye to normal and abnormal ocular function.
13.0 Demonstrate knowledge of the effects ophthalmic devices have in correcting the errors of human vision.
14.0 Demonstrate knowledge of ocular disease and emergencies.
15.0 Demonstrate knowledge of vision therapy in rehabilitation of abnormal ocular functions.
16.0 Demonstrate knowledge of office management.
17.0 Collect patient data under the supervision of a practitioner.
18.0 Demonstrate knowledge of contact lenses as a vision correction device.
19.0 Fabricate ophthalmic prescription spectacles.
20.0 Demonstrate knowledge of frame and lens selection; and eyewear dispensing and adjustment.

Florida Department of Education
STUDENT PERFORMANCE STANDARDS

PROGRAM TITLE: Vision Care Technology/ Opticianry
POSTSECONDARY NUMBER: 0317.070500

HEALTH CAREERS CORE: The Health Careers Core is a core of basic knowledge necessary for any health occupations career. Students who have previously completed the Health Careers Core in any other health science program do not have to repeat the intended outcomes 01-11.

01.0 DEMONSTRATE KNOWLEDGE OF THE HEALTH CARE DELIVERY SYSTEM AND HEALTH OCCUPATIONS--The student will be able to:

01.01 Identify the basic components of the health care delivery system.
01.02 Describe the various types of health care providers and the range of services available including resources to victims of domestic violence.
01.03 Describe the composition and functions of a health care team.
01.04 Identify the general roles and responsibilities of the individual members of the health care team.
01.05 Develop a basic understanding of human needs throughout the lifespan.
01.06 Explain the importance of maintaining professional competence through continuing education.
01.07 Describe trends affecting the delivery system of health care.

02.0 DEMONSTRATE THE ABILITY TO COMMUNICATE AND USE INTERPERSONAL SKILLS EFFECTIVELY--The student will be able to:

02.01 Develop basic listening skills.
02.02 Develop basic observational skills and related documentation strategies in written and oral form.
02.03 Identify characteristics of successful and unsuccessful communication including barriers.
02.04 Respond to verbal and non-verbal cues.
02.05 Compose written communication using correct spelling, grammar, and format.
02.06 Use appropriate medical terminology and abbreviations.
02.07 Recognize the importance of courtesy and respect for patients and other health care workers and maintain good interpersonal relationships.
02.08 Recognize the importance of patient/client education regarding health care.
02.09 Adapt communication skills to varied levels of understanding and cultural orientation.
02.10 Demonstrate telephone usage including taking messages.
02.11 Demonstrate ability to give and follow directions.
02.12 Distinguish between factual reports and personal opinion.

03.0 DEMONSTRATE LEGAL AND ETHICAL RESPONSIBILITIES--The student will be able to:

03.01 Discuss the legal framework of health care occupations.
03.02 Explain the medical liability of health care workers.
03.03 Explain the patients' "Bill of Rights".
03.04 Describe a Code of Ethics consistent with the health care industry.
03.05 Discuss the importance of maintaining confidentiality of information, including computer information.
03.06 Recognize the limits of authority and responsibility of health care workers.
03.07 Recognize and report illegal and unethical practices of health care workers.
03.08 Recognize and report abuse and neglect.

04.0 DEMONSTRATE AN UNDERSTANDING OF AND APPLY WELLNESS AND DISEASE CONCEPTS--The student will be able to:

04.01 Develop a basic understanding of the structure and function of the body systems.
04.02 Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03 Identify psychological reactions to illness including defense mechanisms.
04.04 Recognize the steps in the grief process.
04.05 Explain basic concepts of positive self image, wellness and stress.
04.06 Develop a wellness and stress control plan that can be used in personal and professional life.
04.07 Explain the nutrition pyramid.

05.0 RECOGNIZE AND PRACTICE SAFETY AND SECURITY PROCEDURES--The student will be able to:

05.01 Demonstrate the safe use of medical equipment.
05.02 Recognize and report safety hazards.
05.03 Identify and practice security procedures for medical supplies and equipment.
05.04 Demonstrate proper body mechanics.
05.05 Demonstrate the procedure for properly identifying patients.
05.06 Demonstrate procedures for the safe transport and transfer of patients.
05.07 Describe fire, safety, disaster and evacuation procedures.

06.0 RECOGNIZE AND RESPOND TO EMERGENCY SITUATIONS--The student will be able to:

06.01 Monitor and record vital signs.
06.02 Describe legal parameters relating to the administration of emergency care.

06.03 Obtain and maintain BLS for Healthcare Providers or higher.

06.04 Demonstrate basic understanding of first aid and emergency care.

06.05 Recognize adverse drug related emergencies and take appropriate first aid action.

07.0 RECOGNIZE AND PRACTICE INFECTION CONTROL PROCEDURES--The student will be able to:

07.01 Demonstrate knowledge of medical asepsis.

07.02 Demonstrate knowledge of surgical asepsis.

07.03 Describe how to dispose correctly of biohazardous materials, according to appropriate government guidelines such as OSHA.

08.0 DEMONSTRATE COMPUTER LITERACY--The student will be able to:

08.01 Define terms and demonstrate basic computer skills.

08.02 Describe the uses of computers in health care.

09.0 DEMONSTRATE EMPLOYABILITY SKILLS--The student will be able to:

09.01 Conduct a job search.

09.02 Secure information about a job.

09.03 Identify documents that may be required when applying for a job.

09.04 Complete a job application form correctly.

09.05 Demonstrate competence in job interview techniques.

09.06 Identify or demonstrate appropriate responses to criticism from employer, supervisor, or other persons.

09.07 Identify acceptable work habits.

09.08 Demonstrate knowledge of how to make job changes appropriately.

09.09 Demonstrate desirable health habits.

09.10 Recognize appropriate affective/professional behavior.

09.11 Write an appropriate resume.

10.0 DEMONSTRATE KNOWLEDGE OF BLOOD BORNE DISEASES, INCLUDING AIDS--The student will be able to:

10.01 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.

10.02 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.03 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.04 Apply infection control techniques designed to prevent the spread of diseases to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.05 Demonstrate knowledge of the legal aspects of AIDS, including testing.

11.0 APPLY BASIC MATH AND SCIENCE SKILLS--The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.
11.02 Measure time, temperature, distance, capacity, and mass/weight.
11.03 Make and use measurements in both traditional and metric units.
11.04 Make estimates and approximations and judge the reasonableness of the result.
11.05 Convert from regular to 24 hour time.
11.06 Demonstrate ability to evaluate and draw conclusions.
11.07 Organize and communicate the results obtained by observation and experimentation.
11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

OPTICIANRY: The completion of intended outcomes 12-20 leads to the occupational completion point of opticians: dispensing and measuring (32514216), dispensing optician apprentices, or optometicians.

12.0 APPLY KNOWLEDGE OF ANATOMY AND PHYSIOLOGY OF THE EYE TO NORMAL AND ABNORMAL OCULAR FUNCTION--The student will be able to:

12.01 Demonstrate understanding of the interrelationships and interdependency of various body systems.
12.02 Demonstrate in depth knowledge of anatomy and physiology of the visual system.
12.03 Demonstrate knowledge of growth and development of the eye from birth to old age.

13.0 DEMONSTRATE KNOWLEDGE OF THE EFFECTS OPHTHALMIC DEVICES HAVE IN CORRECTING THE ERRORS OF HUMAN VISION--The student will be able to:

13.01 Demonstrate an understanding of refractive errors.
13.02 Demonstrate knowledge of basic mathematical principles that are involved in ophthalmic and geometrical optics.
13.03 Describe the influence of prisms on the behavior of light.
13.04 Apply the principles of light acting on a curved single refracting surface to the optics of ophthalmic lenses for parallel and nonparallel light.
13.05 Describe the relationship and optical properties of cylindrical lenses.
13.06 Demonstrate knowledge of the theory of lens surface power measuring devices.
13.07 Demonstrate knowledge of prismatic effect by decentration.
13.08 Demonstrate the influence of lens thickness and surface curvature on the effective ophthalmic prescription.

13.09 Diagram lens powers on an optical cross.

14.0 DEMONSTRATE KNOWLEDGE OF OCULAR DISEASE AND EMERGENCIES--The student will be able to:

14.01 Perform ocular first aid.
14.02 Demonstrate knowledge of the differences between the normal and abnormal eye.
14.03 Demonstrate the ability to recognize diseases of the eye and their effect on vision.
14.04 Demonstrate the ability to recognize sight threatening emergencies and related patient management.
14.05 Recognize the implications of sudden vision loss.
14.06 Under supervision, collect clinical data.
14.07 Demonstrate knowledge of the application of pharmacological principles in the treatment of the eye.

15.0 DEMONSTRATE KNOWLEDGE OF VISION THERAPY IN REHABILITATION OF ABNORMAL OCULAR FUNCTIONS--The student will be able to:

15.01 Assess the level of binocularity and identify the compensating anomalies of the developmental process.
15.02 Distinguish between functional and paretic motor problems.
15.03 Under supervision, administrate and interpret procedures to assess the level of binocularity and the remediation of anomalies.
15.04 Assist in/administer visual therapy.

16.0 DEMONSTRATE KNOWLEDGE OF OFFICE MANAGEMENT--The student will be able to:

16.01 Demonstrate knowledge of legal and ethical standards of vision care professionals.
16.03 Maintain and file patient records.
16.04 Bill and collect current and overdue accounts.
16.05 Maintain office inventory.
16.06 Demonstrate knowledge of medical terminology.
16.08 Maintain equipment.
16.09 Schedule patients.
16.10 Complete and file third party forms.
16.11 Maintain office recall system.

17.0 COLLECT PATIENT DATA UNDER THE SUPERVISION OF A PRACTITIONER--The student will be able to:

17.01 Elicit and record patient medical, occupational, recreational and social history.
17.02 Demonstrate knowledge of the principles of measuring visual acuity at different age levels and reading maturational levels.
17.03 Develop skill in assessing visual entrance skills.
17.04 Perform hypertension screening.
17.05 Perform ocular measurements.

17.06 Identify and verify ophthalmic prescription spectacles within accepted laboratory tolerances.
17.07 Measure and record intraocular pressure.
17.08 Measure and record a visual field.
17.09 Perform photographic documentation of ocular conditions.
17.10 Describe components of and instrumentation used in comprehensive vision evaluation.

18.0 DEMONSTRATE KNOWLEDGE OF CONTACT LENSES AS A VISION CORRECTION DEVICE--The student will be able to:

18.01 Explain the history and background of contact lenses.
18.02 Evaluate and record relevant ocular parameters.
18.03 Demonstrate knowledge of the advantage and disadvantages of various contact lens materials and designs.
18.04 Verify and modify the parameters of all types of contact lenses within accepted laboratory tolerances.
18.05 Explain the relationship of a contact lens to the physiology of the eye, considering oxygen and tear flow requirements.
18.06 Describe acceptable vs. unacceptable symptoms a contact lens patient may experience and the clinical procedures used to correct adverse contact lens adaptation.
18.07 Select appropriate contact lens types for patients by their specific personal and visual needs.
18.08 Describe techniques for fitting various types of contact lenses.
18.09 Select appropriate lens care systems and instruct a patient in the maintenance, hygiene, and wearing of all types of contact lenses.
18.10 Demonstrate knowledge of contact lens fee structuring, marketing, and service agreements.
18.11 Demonstrate proper ordering, inventorying, and recordkeeping procedures used with contact lenses.

19.0 FABRICATE OPHTHALMIC PRESCRIPTION SPECTACLES--The student will be able to:

19.01 Demonstrate an understanding of the process of surfacing of lenses.
19.02 Compute lens orientation and layout in preparation for edging.
19.03 Machine and hand edge lenses.
19.04 Temper lenses for impact resistance.
19.05 Drill, groove and notch lenses for rimless mountings.
19.06 Edge polish hard resin lenses.
19.07 Tint hard resin lenses.
19.08 Mount lenses into all frame types to accepted prescription tolerances.
19.09 Perform final inspection of ophthalmic prescription glasses in accordance with American Standard Institute (ANSI) Standards.

20.0 DEMONSTRATE KNOWLEDGE OF FRAME AND LENS SELECTION; AND EYEWEAR DISPENSING AND ADJUSTMENT--The student will be able to:

20.01 Identify ophthalmic frames and parts.
20.02 Determine and record frame and lens measurements.
20.03 Measure and record all appropriate patient measurements for prescription fitting.
20.04 Assist patients with frame and lens selection.
20.05 Adjust all types of frames to standard alignment for dispensing to a patient.
20.06 Demonstrate a working knowledge of specialty ophthalmic lenses.
20.07 Perform repairs on plastic and metal frames.

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GREAT SEAL OF THE STATE OF FLORIDA
IN GOD WE TRUST